

DRAFT BASIC ASSESSMENT REPORT:

Basic Assessment Process for the Proposed Establishment of a Residential Development on Portions 4 and 7 of Erf 2363, Kanku Road, Isipingo, within the eThekwini Municipality, KwaZulu-Natal

Ref Number: DM/0010/2018

PREPARED FOR: ETHEKWINI MUNICIPALITY HUMAN

SETTLEMENTS UNIT

DATE: 24 APRIL 2018



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Industrial
Agriculture
Linear

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Report Reviewed By: Rebecca Bowd – Refer to Appendix

A for CV

Date of review: 25 November 2017

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EXECUTIVE SUMMARY

The Applicant, eThekwini Municipality Human Settlements Unit has proposed the establishment of a high density residential development on Portions 4 and 7 of Erf 2363, Kanku Road in Isipingo, eThekwini Municipality, KwaZulu-Natal. The proposed residential development site is located at GPS Coordinates 29°59'17.20"S and 30°55'19.83"E and is approximately 4ha in extent and is currently undeveloped.

Portion 4 of Erf 2363 is zoned Public Open Space while Portion 7 is zoned Special Residential. The development will require the rezoning of both properties to Public Housing Reservation for the purpose of an infill Residential Housing Development and consolidation of both properties. The site is bordered by residential housing, the Primrose Primary School and the old Isipingo Cemetery. The historic Dick King Cemetery is also located approximately 90m to the east of the development site.

The proposed development is aimed primarily at providing housing for families currently living in a transit camp located 550m to the south of the proposed development site. The development will consist of semi-detached double story high density housing units. There will be 360 residential units. All housing is proposed to have Municipal waterborne sewage, water and electricity, roads and stormwater infrastructure. Access to the development is proposed to be off Kanku Road via an entrance roundabout.

Under natural conditions, the development site would have comprised subtropical coastal forest and bush of the KwaZulu-Natal Coastal Belt vegetation unit. However, the site has largely been transformed by urban sprawl and residential development. In terms of the KwaZulu-Natal Conservation Plan database, the site has been identified as falling within the KwaZulu-Natal Coastal Belt area which is classified as a Biodiversity Priority Area 1 (CBA 1). However, it has been identified that no forest, wetlands or other sensitive units remain on the proposed development site.

In terms of the National Environmental Management Act (NEMA) (107 of 1998) and the Environmental Impact Assessment (EIA) Regulations 2014 (amended 2017), published in Government Notices No. R. 327, 325 and 324 of 2017 (GNR 983, 984 and 985 of 2014) and Section 21 of the National Water Act (36 of 1998), the proposed development requires a Basic Assessment process and Water Use License Application to be conducted.

The main issues raised to date during the public participation process for the project are:

- Loss of Public Open Space;
- Need for alternative sites to be investigated;
- Damage to and loss of access to Isipingo Cemetery and historic Dick King Graveyard;
- Loss of biodiversity / biodiversity impacts as the site falls within a Critical Biodiversity Area;
- Socio-economic impacts associated with transit camp being brought to area, such as increased drug
 use, prostitution;

- Safety and security risks to surrounding residents;
- Devaluation of properties as high density development is out of character with existing low density units;
- Unfairness as have to pay high rates to fund development which will result in devaluation of property;
- Damage to nearby old buildings through the use of heavy machinery on site;
- Noise, waste management and odour impacts;
- Transit camp residents being transferred from another Ward;
- Increase in traffic and congestion, most notably from inadequate parking and increased public transportation;
- Increase in pedestrian traffic;
- Development on the site could be at risk from flooding and subsidence;
- Need for additional local amenities such as shops, schools, clinic and sports facilities as a result in creased population;
- Risk of protests if there is not sufficient electricity;
- Municipality forcing a development which the community does not want;
- The fact that the Municipality has not cleared the site of Category 1 alien vegetation must not be used as an argument to develop at this location;
- Inadequate service infrastructure and facilities in the area; and
- Suitability of the development type (high density municipal housing in a medium density, high rate paying area).

The following Specialist Studies have been undertaken as part of the Basic Assessment Process for the proposed high density residential development on Kanku Road in Isipingo:

- Biodiversity Assessment including a floral and faunal study;
- Heritage Impact Assessment;
- Socio-Economic Survey;
- Traffic Impact Assessment;
- Wetland, Delineation, Health and Functional Assessment;
- Geotechnical Investigation;
- Stormwater Management Plan;
- Civil Engineering Designs; and
- Floodplain Layout.

The Environmental Assessment Practitioner (EAP) concludes that no fatal-flaws have been identified during the Basic Assessment Process, and, provided the Environmental Management Programme (EMPr) and recommendations made in this report are **strictly adhered to**, there should be no significant, detrimental impacts on the environment.

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1. PROJECT & ACTIVITY DESCRIPTION

1.1 PROJECT TITLE

Basic Assessment Process for the proposed establishment of a residential development on Portions 4 and 7 of Erf 2363, Kanku Road, Isipingo, eThekwini Municipality, KwaZulu-Natal.

1.2 LISTED ACTIVITIES

All the listed activities that make up this application are listed below:

	GNR 327 and 324 - Basic Environmental Assessment:								
Listed Activity	Activity Description	Applicability							
GNR 327 of 2017 (GNR 983 of 2014) - Part 27	"The clearance of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for — (i) the undertaking of a linear activity; (ii) maintenance purposes undertaken in accordance with a maintenance management plan."	Applicable as the proposed development site is approximately 4ha in extent and is currently undeveloped. It comprises 1.84ha of forest dominated by alien tree species and 1.79ha of secondary grassland and mowed lawn. The site has a low biodiversity status but is still considered indigenous vegetation.							
GNR 324 of 2017 (GNR 985 of 2014) - Part 4	"The development of a road wider than 4 metres with a reserve less than 13.5 metres. d. KwaZulu-Natal (viii). Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (xiii). Inside urban areas: (aa) Areas zoned for use as public open space"	Applicable as the proposed project includes the construction of access and internal roads wider than 4 meters. The development site falls within an area that is classified as a Biodiversity Priority Area 1 (CBA 1) historically comprising KwaZulu-Natal Coastal Belt vegetation. In addition, Portion 4 of Erf 2363 is zoned as Public Open Space.							
GNR 324 of 2017 (GNR 985 of 2014) - Part 12	"The clearance of an area of 300 square 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. d. KwaZulu-Natal. v. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; vii. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning;	Applicable as more than 300 square meters of indigenous vegetation will be cleared from the proposed development site, which falls within an area that is classified as a Biodiversity Priority Area 1 (CBA 1). In addition, Portion 4 of Erf 2363 is zoned as Public Open Space.							

The Application for Environmental Authorisation form for this project is presented in Appendix B.

1.3 LIST OF LEGISLATION, POLICIES AND/OR GUIDELINES THAT ARE RELEVANT TO THE APPLICATION

Title of legislation, policy or guideline:	Administering authority:	Date:
eThekwini Municipal Spatial Development Framework (SDF)	eThekwini Municipality	2017
eThekwini Municipality Integrated Development Plan – 5 Year Plan 2017/18 to 2021/22	eThekwini Municipality	2017/2018
Spatial Planning and Land Use Management Act (SPLUMA)	eThekwini Municipality	2013
KwaZulu-Natal Planning and Development Act (PDA)	eThekwini Municipality	2008
KZN Terrestrial Systematic Conservation Plan (C-Plan)	SANBI	2010
National Environmental Management Act (NEMA)	DEA	1998
Section 28 of the National Environmental Management Act, 1998 (Polluter Pays Principle and Duty of Care)	DEA	1998
Environmental Impact Assessment Regulations, section 24(5) and 44 of the National Environmental Management Act, 1998	DEA	2014
Integrated Environmental Management Guideline Series: Companion to the EIA Regulations 2010 and Public Participation 2010.	DEA	2010
The National Water Act (NWA), 1998 (36 of 1998)	DWS	1998
National Water Act Regulations, 1999	DWS	1999
The National Heritage Resources Act, 1999	SAHRA	1999
KwaZulu Natal Heritage Resources Act 10 of 1997	SAHRA	1997
The Constitution of South Africa 108 of 1996	DOJCD	1996
National Roads Act 83 of 1996	DOT	1998
Water Services Act 108 of 1997	DWS	1997
EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning: Guideline on Alternatives,	DEA&DP	2011
EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning: Guideline on Public Participation.	DEA&DP	2011
EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning: Guideline on Need and Desirability.	DEA&DP	2011
EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning: Guideline on Generic Terms of Reference for EAPs and Project Schedules.	DEA&DP	2011
Guideline on Need and Desirability, Integrated Environmental Management Guideline Series 9, Department of Environmental Affairs (DEA), Pretoria, South Africa	DEA	2014
Department of Environmental Affairs (2017) Public Participation Guideline in terms of NEMA EIA Regulations.	DEA	2017

1.4 SG 21 DIGIT CODE(S) OF THE PROPERTIES

N	0	F	Т	0	1	5	6	0	0	0	0	2	3	6	3	0	0	0	0	4
N	0	F	Т	0	1	5	6	0	0	0	0	2	3	6	3	0	0	0	0	7

1.5 PHYSICAL ADDRESS & FARM NAME

Address	Kanku Road, Isipingo, eThekwini Municipality
Farm Name	Portion 4 and Portion 7 of Erf 2363 Isipingo
Town	Isipingo
Postal Code	4001

1.6 COORDINATES OF THE DEVELOPMENT

Corner/Position	Latitude (S)	Longitude (E)
Point 1	29°59'13.65"S	30°55'17.31"E
Point 2	29°59'17.80"S	30°55'26.15"E
Point 3	29°59'20.82"S	30°55'23.87"E
Point 4	29°59'18.87"S	30°55'19.91"E
Point 5	29°59'20.83"S	30°55'18.59"E
Point 6	29°59'18.87"S	30°55'14.32"E

1.7 DETAILED PROJECT DESCRIPTION OF THE ACTIVITIES TO BE UNDERTAKEN

Project Background

The Applicant, eThekwini Municipality Human Settlements Unit wishes to apply for Environmental Authorisation for the proposed development of a high density, Municipal housing development on Portions 4 and 7 of Erf 2363 located on Kanku Road in Isipingo, eThekwini Municipality. The proposed project is aimed primarily at providing housing for the residents of the Isipingo Transit Camp (also known as Zamani Camp) which is located approximately 550m to the south of the site. The Isipingo Transit Camp was established in 2009 by the eThekwini Municipality to temporarily house families who had been residing in Umlazi 'D' Section, to make way for the extension of the King Zwelitini Football Stadium for the 2010 Soccer World Cup.

The Isipingo Transit Camp has been semi formalised by the Municipality through the provision of running water, a few toilet facilities housed in containers and electricity. Despite this, significant pollution of the surrounding environment, including sensitive wetland habitat is occurring as a result of the influx of solid waste, raw sewage, sediment and stormwater runoff from the transit camp into the surrounding environment. Recent severe storms have worsened the situation making the need to provide alternative housing for the transit camp residents a matter of extreme urgency.

The rehabilitation of the Isipingo Transit Camp site will be undertaken by the eThekwini Municipality Human Settlements Unit once the camp residents have been relocated.

Development Property

The proposed site for the Kanku Road housing development comprises Portions 4 and 7 of Erf 2363. Portion 4 of Erf 2363 is 1.4ha in extent and is zoned as Public Open Space. Portion 7 of Erf 2363 is 2.7ha in extent and is zoned as Special Residential 350. Both properties fall under the ownership of the eThekwini Municipality. The proposed housing development requires the rezoning of both properties to Public Housing Reservation for the purpose of an infill residential housing development and the consolidation of both properties.

The proposed development site is currently undeveloped and falls within the KwaZulu-Natal Coastal Belt vegetation unit, which is ranked as critically endangered and classified as a Biodiversity Priority Area 1 (CBA

1) by the KwaZulu-Natal Conservation Plan database. Under natural conditions the development site would have comprised subtropical coastal forest and bush. However, the site has largely been transformed by surrounding urban development and currently comprises approximately 1.5ha of wooded forest dominated by alien tree species and 1.8ha of secondary grassland and mowed lawn.

The development site is located approximately 15km south of Durban within the Isipingo Hills area. The development site is surrounded by low to medium density residential housing, the Primrose Primary School to the north and the old Isipingo Cemetery to the north east. The historic St James Church Cemetery (better known as the Dick King Graveyard) is located approximately 90m to the east of the development site. The cemetery is a Grade II Provincial heritage resource and dates back to the 1800s.

Development Infrastructure

The proposed residential development will consist of 360 semi detached, double story, two bedroom housing units. Each unit will have a proposed floor space of $50m^2$. The proposed development will also include internal roads comprising cul-de-sac and access ways. The cul-de-sac roads will have 8/10.5m road reserves with 4.5/7m wide roads. The access ways will have 10.5m road reserves with 4.5m wide roads. All roads will be surfaced, with concrete kerbing on one side to act as a drainage channel and to allow for stormwater from the housing units to discharge onto the roads. There will also be a central recreational area as part of the residential development.

All housing is proposed to have Municipal waterborne sewage, water and electricity and stormwater infrastructure. Access to the development is proposed to be off Kanku Road via an entrance roundabout. The existing Kanku Road and Yellowwood Grove intersection will be formalised into a new multi-leg traffic circle as part of the proposed development. There are no external roads or intersection upgrades required as a result of this proposed development. A total of approximately 100 parking bays will be provided for the proposed housing development, as based on the land-use and demographics of the associated target market, a parking rate of 1 bay per 5 units is deemed acceptable.

Refer to Figures 1 and 2 for locality maps of the property and surrounding areas, Figure 3 for the layout plan for the proposed Kanku Road residential development and Plates 1 - 4 for photographs of the site.

Provision of Services

Stormwater

The Stormwater Management Plan compiled for the proposed development site divides the 4ha site into two catchment areas based on the natural flow of the land being in different directions. Area 1 is 1.9ha in extent and Area 2 is 2.1ha in extent. Stormwater design calculations were undertaken for each area and each area is to have its own attenuation pond and retention facilities to ensure that the post-development runoff will be limited to the pre-development runoff levels. Pond 1, to cater for catchment Area 1 will have an approximate capacity of 180m³ and will be located on the eastern boundary of the site. Pond 2, to cater for catchment Area 2, will have an approximate capacity of 140m³ and will be located on the south western corner of the site. The proposed development site is located outside of the 1:100 year flloodline of the nearest river, the Isipingo River, which lies to the south west of the site.

The two attenuation ponds will comprise concrete lined ponds which will be designed to be constantly dry (i.e. water is facilitated to flow from the outlet headwall to an inlet discharge sump). The ponds have been designed with emergency overflow measures which allow for drainage when storm peaks are in excess of the 1:50 post development scenario. For health and safety reasons no water will be retained in the ponds under normal conditions.

In terms of the internal stormwater management, the internal roads will be designed to accommodate the platform and roof runoff. Stormwater surface runoff will be directed from the platforms and roofs to the road

surface to discharge into side inlet drains at strategic points and directed into sub surface concrete spigot and socket pipes system. These pipe systems will then discharge via headwall outlets with erosion protection into the attenuation ponds.

Sewer

There are existing Municipal bulk sewer lines located along the south western and south eastern portions of the site. It is proposed to link the new sewer reticulation for the residential development into the existing bulk Municipal system at two separate connection points. The residential development will produce an additional average daily discharge of 0.27 Mega litres of sewage. This additional discharge will be distributed between the two connection points.

The first proposed connection point is located in the south western portion of the site and will link into an existing 150mm diameter Municipal bulk line and will service 53% of the development. The existing 150mm diameter line discharges into the Flamboyant Road Pump Station which is located approximately 690m from the development site.

The second proposed connection point is located in the south eastern portion of the site and will link into an existing 200mm diameter Municipal bulk line and will service 47% of the development. The existing 200mm diameter line discharges into the Avenue East Pump Station which is located approximately 1.8km away from the development site.

Full waterborne sanitation will be designed with the provision for servicing each site. All mainline sewers will be 160mm diameter and house connections will be 110mm diameter. All pipes will be heavy duty uPVC pipes that comply with SABS 791.

The eThekwini Municipality's Water and Sanitation Department has confirmed that the existing Municipal bulk sewer pipe network has sufficient capacity to cater for the additional discharge generated from the proposed new development (Appendix C). However, the existing sewer pump station at both Avenue East and Flamboyant Road does not have sufficient capacity to cater for the additional discharge generated from the proposed development and will require upgrading.

Two options for the upgrade of the Flamboyant Drive sewer pump station have been considered with the preferred option being that the existing sewer pump station at Flamboyant Drive be upgraded (including new rising main) and rerouted through to the Isipingo Wastewater Treatment Works.

It is envisaged that Map Africa Consulting Engineers will be appointed to undertake the necessary designs and engineering works for the sewer pump station upgrade. Map Africa Consulting Engineers have already begun this process and have already been in communication with the various EWS officials to expedite this work. This project is envisaged to run concurrently with the proposed Kanku Road residential development project.

Water Reticulation

There is an existing 100mm diameter Municipal bulk watermain located along Kanku Road at the main access way of the site. It is proposed to link the development into the bulk watermain at one point. Confirmation has been received from the eThekwini Water and Sanitation Planning Branch that there is sufficient capacity within the existing Municipal bulk water system to accommodate the additional water demand generated by the proposed residential development.

The Kanku Road residential development is expected to require an average daily water demand of 0.270ML and peak daily demand of 0.351ML. A 75mm diameter pipe will be used to service the development and will be connected to the existing 100mm water supply line.

The supply reservoir in the area is the Isipingo Hills Reservoir which has a capacity of 22.9ML. The potable water demand in the area is currently approximately 11.3ML.

Electricity Supply

Ethekwini Municipality's Electrical Department are the local authority which supplies electricity to the area. Based on preliminary discussions with the Electricity Department, a new electrical substation may be required to supply the site. There are existing electrical services running adjacent to the site which supply the surrounding formal dwellings alongside the site. Once the preliminary layout drawings have been approved, the layouts will be issued to the following service providers to provide current and future service duct (electrical, telecoms etc.) requirements:

- · eThekwini Electricity Department;
- · Telkom; and
- · Neotel.

Allowances have been made, within the Project Engineering Costs, for new ducts for these service providers.

Waste

General waste will be collected from the Kanku Road residential development site on a weekly basis as per the existing Municipal waste management service for the Isipingo Hills residential area.

Refer to Appendix C for the Civil Design Report and Letter from the eThekwini Water and Sanitation Unit and Appendix D for the Stormwater Management Plan.



Figure 1: Locality Map of the proposed Residential Development Site on Portions 4 and 7 of Erf 2363 Isipingo (Google Earth).

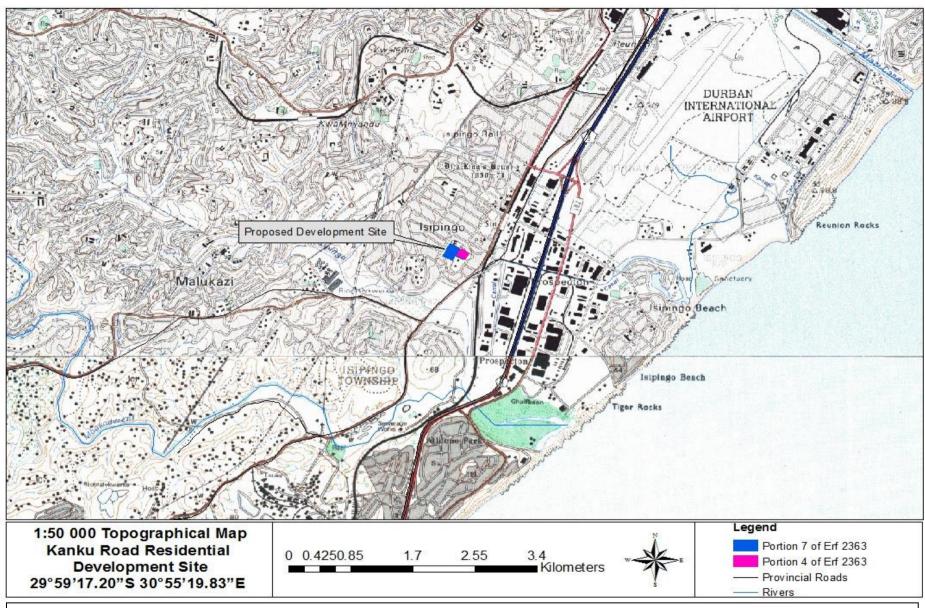


Figure 2: Topographic Map of the Kanku Road Residential Development Site and surrounds.

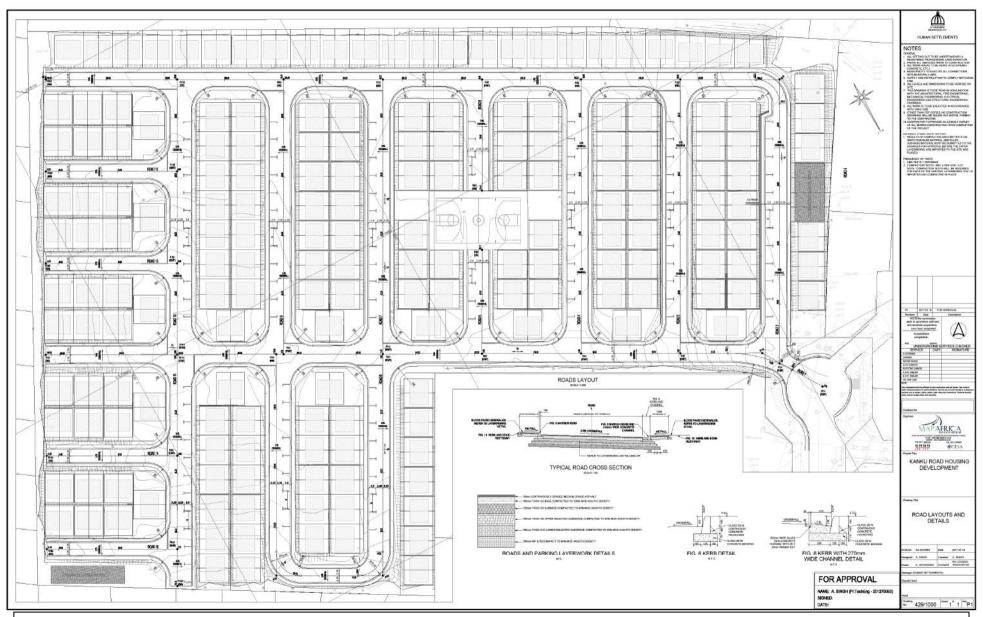


Figure 3: Layout Map for the proposed Kanku Road Residential Development on Portions 4 and 7 of Erf 2363 Isipingo (Map Africa).

Site Photos



Plate 1: Mowed secondary grassland area on Portion 7 of Erf 2363 Isipingo.



Plate 2: Alien tree forest area on Portion 4 of Erf 2363 Isipingo.



Plate 3: Kanku Road looking towards the proposed development site.



Plate 4: View of the historic Dick King Graveyard located near to the development site.

2. NEED AND DESIRABILITY

Motivate and explain the need and desirability of the activity.

The following section makes use of the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) Guideline on Need and Desirability (2011) and the Department of Environmental Affairs (DEA) Pretoria, Integrated Environmental Management Guideline Series 9: Guideline on Need and Desirability (2014).

1. Is the activity permitted in terms of the property's existing land use rights?

The proposed site for the Kanku Road housing development comprises Portions 4 and 7 of Erf 2363. Portion 4 of Erf 2363 is zoned as Public Open Space while Portion 7 of Erf 2363 is zoned as Special Residential 350. The proposed housing development requires the rezoning of both properties to Public Housing Reservation for the purpose of an infill residential housing development and the consolidation of both properties. A rezoning application under the KwaZulu-Natal Planning and Development Act (PDA) (Act No. 6 of 2008) and the Spatial Planning and Land Use Management Act (SPLUMA) (Act No. 16 of 2013) is therefore required for the proposed residential development on these properties.

2. Will the activity be in line with the Provincial Spatial Development Framework (PSDF)?

The National Spatial Development Framework (NSDF) promotes rapid economic growth that is sustained and inclusive, and is a pre-requisite for the achievement of other policy objectives, among which poverty alleviation is key. The Provincial SDF takes as its starting point this goal of sustainable development. Development is only acceptable and in the public interest if it is economically justifiable, socially equitable and economically viable, i.e. environmentally sustainable. This means that the development needs of present generations should be met without the ability of future generations to meet their own needs, being compromised.

The map below (Figure 4) indicates that the Kanku Road residential development site falls within an Economic Value Adding Area. Areas of Economic Value Adding can be defined as key economic centres and areas where all of the variety of economic sectors (agriculture, tourism, manufacturing, services) are prevalent and perceived to have good potential to be further expanded on. These areas are visibly linked to high accessibility areas with existing bulk infrastructure and relatively high population densities which would both contribute to the economic expansion and benefit from interventions in these areas. Due to these factors, further economic processing and value adding at a provincial level, are mainly proposed within these identified areas.

At a strategic level, the PSDF strongly reinforces the concept of promoting development around the main activity corridors of the Province. The KZN Provincial Spatial Economic Development Strategy (PSEDS) states that infrastructure investment and development spending should primarily support localities that will become future growth nodes, supported by Municipal integrated development plans. The eThekwini Municipal area is one such area where infrastructural development and employment is urgently needed.

The establishment of the Kanku Road residential development will address job creation during the construction phase and optimise land use to address the housing backlog in the greater Durban area, which is line with the goals of the Provincial SDF.

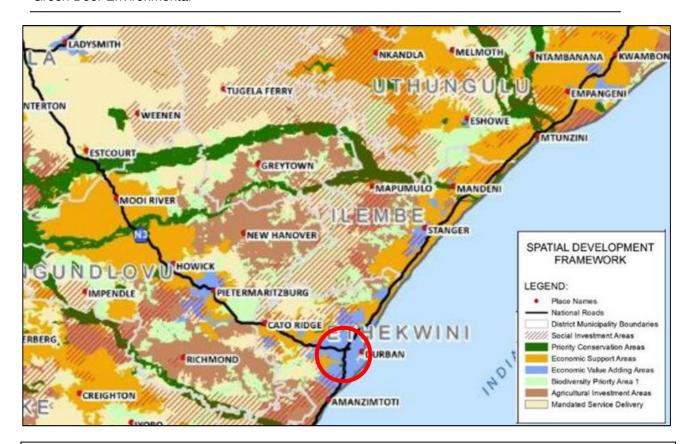


Figure 4: Provincial Spatial Development Framework (PSDF).

- 3. Will the activity be in line with the Urban Edge / Edge of Built Environment for the area? This is not applicable to this application.
- 4. Will the activity be in line with the Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality; would the approval of this application compromise the integrity of the existing approved and credible Municipal IDP and SDF?

The Municipal Systems Act, Act No. 32 of 2000 (MSA) requires that each Municipality prepare an Integrated Development Plan (IDP) and Spatial Development Framework (SDF) to serve as a tool for transforming local governments towards facilitation and management of development within their areas of jurisdiction.

According to the eThekwini IDP the Municipality has a very high ratio of housing and infrastructure backlogs relative to the total population. Therefore, one of the priorities within the Municipality is the provision of adequate housing for residents. It is highlighted that the Municipality wishes to promote high density multi storey housing developments on vacant and undeveloped sites, because there is an inability to access well located land for Municipal housing, which in turn perpetuates the inability to escape poverty. As such, the nature, form and scale of the development is directly in line with this Municipal goal. The Municipality also highlights the importance of job opportunities and skills development. The proposed residential development will result in the generation of job opportunities during the construction phase and associated skills development and transfer. This in turn, will result in income generation, the associated upliftment of community members, as well as local economic development within the area.

The eThekwini SDF identifies the Isipingo area as an urban node in the Municipality. Thus the proposed residential development is in line with the SDF.

5. Will the activity be in line with an approved Structure Plan of the Municipality?

Yes. The proposed residential development is in line with the structure plan of the eThekwini Municipality. The eThekwini IDP and SDF both identity the need for the improved infrastructure and adequate provision of high density, social housing, as well as job creation within the Municipality in order to reduce poverty.

6. Will the activity be in line with an Environmental Management Framework (EMF) adopted by the Department; would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?

This is not applicable to this application.

7. Will the activity be in line with any other plans (e.g. Guide Plan)?

This is not applicable to this application.

8. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?

Yes. The proposed residential development is in line with the SDF and IDP timeframes / priority programs for the eThekwini Municipal area. Refer to Point 4 above.

9. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate?).

At a national, provincial, district and local Municipal level there is a significant need for the provision of high density, social housing to address the housing backlog in the country and also help alleviate the negative social and environmental impacts that result from the prevalence of informal settlements. As such, the proposed Kanku Road residential development is a societal priority as it will result in the provision of formal housing for residents of the Isipingo Transit Camp. This will alleviate the serious negative environmental impacts that are currently occurring at the transit camp site from the influx of solid waste, raw sewage, sediment and stormwater runoff into the surrounding environment. The current conditions at the transit camp also pose a serious health risk to the camp residents.

However, at a local community level there have been significant objections raised by the Isipingo Hills community to the proposed establishment of a high density housing development at the development site. These objections relate to the use of Public Open Space for a residential development and the appropriateness of locating a high density Municipal housing development in a medium density middle to upper income residential area.

10. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development?

Refer to Section 1.7 of this Report for a detailed description of the service requirements for the proposed Kanku Road residential development project. As the proposed development site is currently undeveloped a Stormwater Management Plan has been compiled to attenuate surface stormwater runoff to ensure that the post-development runoff will be limited to pre-development levels. In terms of sewer it is proposed to

link the development sewer reticulation into the existing bulk Municipal system at two points. The eThekwini Municipality's Water and Sanitation Department has confirmed that the existing Municipal bulk sewer pipe network has sufficient capacity to cater for the additional discharge generated from the proposed development. However, the existing sewer pump station at Flamboyant Road does not have sufficient capacity to cater for the additional discharge generated from the proposed development and will require upgrading, which is being undertaken concurrently, as a separate project. There is available capacity within the existing bulk water system to accommodate the proposed development. In terms of electricity provision, a new substation may be required to supply the site from the existing network. Lastly, the development will be incorporated into the existing Municipal waste management service that covers the Isipingo Hills residential area.

11. Is this development provided for in the infrastructure planning of the Municipality, and if not, what will the implication be on the infrastructure planning of the Municipality (priority and placement of services and opportunity costs)?

Refer to point 10 above and Section 1.7 for a detailed description of service provision.

12. Is this project part of a national programme to address an issue of national concern or importance?

Yes, the proposed Kanku Road residential development is a Government funded public sector project aimed at providing formalised housing and service infrastructure for residents of informal settlements.

13. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)

The proposed development site is located in the Isipingo Hills residential area, in close proximity to major road networks (the M35 and N2), the Isipingo Rail light industrial area and commercial complex. This allows for easy access to these industrial and commercial areas for job opportunities. As many of the residents of the Kanku Road housing development will be reliant on public transport, the site is ideally suited close to major railway, bus and taxi routes. These factors all favour the use of the site for the proposed Kanku Road housing development.

However, as highlighted in Point 9 above, there are significant objections to the establishment of a high density housing development at the development site. These objections relate to the use of Public Open Space for a residential development and the appropriateness of locating a high density Municipal housing development in a medium density middle to upper income residential area.

14. Is the development the best practicable environmental option for this land/site?

Refer to Point 13 above. The proposed housing development will result in the loss of Public Open Space and will require the rezoning of both properties to Public Housing Reservation for the purpose of an infill residential housing development and the consolidation of both properties. However, from an environmental perspective the development site currently has a low biodiversity significance and is not adequately managed or maintained by the Municipality. As a result, alien invasive vegetation is prevalent on the site.

As it currently stands, the use of the site for a residential development is an acceptable landuse. However, as a portion of the site is zoned for Public Open Space, the option exists for the Municipality to remove the alien invasive vegetation and maintain the site for open space. Given the ongoing loss of open space in the Municipal area, the maintenance of the site for open space would also be a beneficial land use.

15. Will the benefits of the proposed land use/development outweigh the negative impacts of it?

Yes, the proposed housing development will enable the provision of formalised housing and services for the residents of the Isipingo Transit Camp, bringing about social upliftment. It will help towards clearing the housing backlog in the eThekwini Municipality as well as alleviate the negative environmental and health impacts that are currently occurring at the Isipingo Transit Camp. The development will also contribute to job creation during the construction phase.

16. Will the proposed land use/development set a precedent for similar activities in the area (local Municipality)?

No. If approved, the Kanku Road housing development will be an infill residential development located within an existing, fully developed residential area. Spatially there is little scope for the development of further high density Municipal residential developments in the surrounding Isipingo Hills area. However, at a broader Municipal level there is a drive to develop high-density multi-storey housing developments on vacant and undeveloped sites, because there is a lack of well-located, suitable open land for Municipal housing.

17. Will any person's rights be negatively affected by the proposed activity/ies?

No. The Public Participation Process has been fulfilled as required under NEMA, informing the public of the intended development. All neighbours were notified of the proposed development and given the opportunity to lodge any concerns / objections regarding the proposed development.

18. Will the proposed activity/ies contribute to any of the 18 Strategic Integrated Projects (SIPS)?

The proposed development will contribute towards the provision of housing and basic service infrastructure.

Strategic Integrated Projects	X = yes
Green economy + "Green" and energy-saving industries	
Infrastructure – electricity (generation, transmission & distribution)	
Biofuels	
Basic services (local government) – electricity and electrification	Х
Basic services (local government) – area lighting	
Infrastructure – transport (roads, land strips)	
Basic services (local government access roads)	
Basic services (local government) – public transport	
Infrastructure – water (bulk and reticulation)	Х
Basic services (local government) – sanitation	Х
Basic services (local government) – waste management	Х
Agricultural value chain + agro-processing (linked to food security and food pricing imperatives)	
Infrastructure – information and communication technology	
Tourism + strengthening linkages between cultural industries and tourism	
Basic services (local government) – public open spaces and recreational facilities	

19. What will the benefits be to society in general and to the local communities?

The Kanku Road residential development will have both social and environmental benefits. The proposed residential development will help address the housing backlog that currently exists in the eThekwini Municipality. The proposed development will provide formalised housing and services to residents of the

informal Isipingo Transit Camp, which will result in social upliftment and help alleviate some of the social problems often associated with informal settlements such as crime, prostitution, substance abuse and unemployment. The relocation of the camp residents and closing of the transit camp will alleviate the serious negative environmental impacts that are currently occurring at the transit camp site from the influx of solid waste, raw sewage, sediment and stormwater runoff into the surrounding environment. In addition to the above, approximately 100 skilled and unskilled employment opportunities will be created during the construction phase and 4 semi-skilled employment opportunities during the operational of the Kanku Road housing development.

20. Any other need and desirability considerations related to the proposed activity?

Refer to Section 19 above. The proposed residential development will help alleviate the housing shortage in the eThekwini Municipality. It will provide employment opportunities and will also help alleviate the negative environmental impacts that are currently associated with the Isipingo Transit Camp.

However, the proposed residential development will also result in the loss of Public Open Space. Given the ongoing loss of open space in the Municipal area, the maintenance of the site for open space should be given consideration. Lastly, consideration should also be given to the appropriateness of locating a high density Municipal housing development in a medium density, middle to upper income residential area.

21. How does the project fit into the National Development Plan for 2030?

The proposed Kanku Road residential development addresses Points 1 and 3 of the National Development Plan for 2030, through the creation of jobs and the provision of housing and service infrastructure.

1.	Unemployment	Х
2.	The quality of school education for black people is poor.	
3.	Infrastructure is poorly located, inadequate and under-maintained.	Х
4.	Spatial divides hobble inclusive development.	
5.	The economy is unsustainably resource intensive.	
6.	The public health system cannot meet demand or sustain quality.	
7.	Public services are uneven and often of poor quality.	
8.	Corruption levels are high.	
9.	South Africa remains a divided society.	

22. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

This Basic Assessment Report covers all the objectives set out in Section 23 of NEMA. Refer to Section 8 of this Report.

23. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

Section 2 of NEMA states that 'environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably'. The disturbance of ecosystems has been minimised and rehabilitation guidance is included in the EMPr.

3. ALTERNATIVES

3.1 "Alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to —

(a) The "do nothing" option of not implementing the activity:

The 'do nothing' option would mean that the proposed Kanku Road residential development on Portions 4 and 7 of Erf 2363 in Isipingo will not be undertaken and the development site will remain in its present undeveloped state.

Section 26 of the Constitution of the Republic of South Africa guarantees its citizens the right to housing. The State is mandated to take steps to achieve the progressive realisation of this right. The eThekwini Municipality currently faces an enormous housing backlog. This challenge is exacerbated by a lack of suitable and affordable land for housing developments as well as ongoing urban migration and land invasions. As a result, the Municipality is focusing on establishing high-density multi-storey housing developments on vacant and undeveloped sites. The proposed Kanku Road development site has been identified by the Municipality as a suitable site for an infill residential development with the aim of providing formalised housing for the Isipingo Transit Camp residents.

The Kanku Road residential development will have social, environmental and economic benefits. The proposed residential development will help address the housing backlog that currently exists in the eThekwini Municipality. The proposed development will provide formalised housing and services to residents of the informal Isipingo Transit Camp, which will result in social upliftment and help alleviate some of the social problems often associated with informal settlements such as crime, prostitution, substance abuse and unemployment. There are currently also health risks to the transit camp residents as well as surrounding communities resulting from a lack of basic service infrastructure and poor sanitation and waste management practices at the camp. The relocation of the transit camp residents to a formalised housing development will have significant health benefits to both the camp residents and surrounding communities at large.

The relocation of the transit camp residents and closing of the transit camp will alleviate the serious negative environmental impacts that are currently occurring at the transit camp site. The Isipingo Transit Camp is located adjacent to a fully functional wetland that feeds into the Isipingo Estuary. The wetland is one of only 25 sites in the world at which the Pickersgill Reed Frog exists and also provides a refuge for a number of other frog species, birds and reptiles. The integrity of the wetland is under increasing threat directly as a result of the proximity of the transit camp and influx of solid waste, raw sewage, sediment and stormwater runoff into the surrounding environment.

In addition to the above, approximately 100 skilled and unskilled employment opportunities will be created during the construction phase and 4 semi-skilled employment opportunities during the operational phase of the Kanku Road housing development.

If the "do nothing" option is selected, none of the above social, environmental and economic benefits will be realised. There will likely be an increasing negative impact on the environment at the transit camp site, as well as the socio-economic wellbeing of the transit camp residents, as they will continue to live without formalised housing or basic services.

However, should the proposed development site remain in its current undeveloped state, the negative impacts associated with the proposed residential development will also not occur. These include the loss of Public Open Space and the possible negative socio-economic impacts on the surrounding Isipingo Hills community, such as increased crime, devaluation of properties, noise and aesthetic impacts.

If not developed, it is not know what alternative land use the Municipality may propose for the development site. In addition, although a landowner has the responsibility to remove alien vegetation from their property, it is not known at this stage whether Municipal funds will become available for this.

(b) The property on which or location where it is proposed to undertake the activity:

Alternatives in terms of relocating the Isipingo Transit Camp residents to existing Municipal housing developments have been investigated by the Municipality. At its inception, the Isipingo Transit Camp comprised of approximately 780 families. To date, the Municipality has relocated 320 families from the Isipingo Transit Camp to the newly developed Cornubia housing project. However, there is no more available space at this or other Municipal housing developments as all remaining available units have beneficiaries allocated. As such, the only option available to the Municipality is the establishment of Greenfield housing projects to meet the housing backlog.

A number of potential Greenfield housing projects are currently being investigated by the Municipality. These include:

- The Kanku Road Housing Project (this project);
- · Craigieburn Housing Project;
- Umkomanzi Draft Housing Project; and
- Pilgrim X Housing Project.

The proposed Kanku Road development site on Portions 4 and 7 of Erf 2363, Isipingo has been identified by the Municipality as a suitable site for an infill residential development with the aim of providing formalised medium to high-density housing. This is because the proposed development site is adequately sized (4ha), currently undeveloped, surrounded by existing housing and service infrastructure and is owned by the Municipality.

As shown in Figure 5 below, there is a lack of suitably sized undeveloped land in the Isipingo area that may be investigated as an alternative location for the proposed residential development. The area to the south of Isipingo, which is undeveloped, comprises floodplain and wetland and is therefore unsuitable for development.

The proposed development site on Portions 4 and 7 of Erf 2363 is the only available Municipally owned undeveloped property in the Isipingo area for the proposed residential development. Due to budgetary constraints, the option of purchasing private land for redevelopment is also not a feasible option for the Municipality.



Figure 5: Map showing the lack of alternative development sites in the Isipingo area (Google Earth).

(c) The type of activity to be undertaken:

The primary objective of the proposed Kanku Road residential development project is to establish high-density, low-cost (government) housing on Portions 4 and 7 of Erf 2363 in Isipingo. The eThekwini Municipality has not proposed any alternative activities on the site beyond the 'do-nothing' option. As such, no alternative activity types have been assessed in this Report.

(d) The design or layout of the activity:

Several alternative layouts have been investigated as part of the Basic Assessment Process for the proposed Kanku Road residential development. The initially proposed layout plan (refer to Figure 6 below) included 403 semi-detached double-story units with 40m² floor space. However, due to on-site space constraints, the proposed development layout was amended with the number of units decreasing to 360, which allows for an increased floor space of 50m². The amended layout also allows for a central, on-site recreational area (refer to Figure 3 for the amended, preferred layout plan).



Figure 6: Originally proposed 403-unit Layout Plan (SADC).

Several alternative options for the provision of parking for the Kanku Road residential development were also investigated during the Basic Assessment Process. It was initially proposed to include an on-site parking bay for each unit on the development layout plan, which required extending the frontage of the site to 6m to accommodate the on-site parking. However, this reduced the number of units that could be accommodated on the site to 317. The option of providing on-street parking rather than on-site parking, by reducing the frontage of the site to 3.25m, was investigated and found to be the preferred option. Based on the land-use and demographics of the associated target market, a parking rate of 1 bay per 5 units is deemed suitable. The preferred layout therefore includes approximately 100 on-street parking bays.

(e) The technology to be used in the activity:

Technological alternatives in terms of sewer reticulation were investigated as part of the project. It is proposed to link the sewer reticulation for the Kanku Road development into the existing bulk Municipal system at two separate connection points, as there are two existing Municipal bulk sewer lines located along the south western and south eastern portions of the site which discharge into the Flamboyant Road Pump Station and Avenue East Pump Station respectively. However, the eThekwini Municipality's Water and Sanitation Department has confirmed that the existing sewer pump station at both Avenue East and Flamboyant Road does not have sufficient capacity to cater for the additional discharge generated from the proposed development and will require upgrading.

The upgrade of the Flamboyant Drive sewer pump station is being undertaken as a separate project and two options for the upgrade of the Flamboyant Drive sewer pump station have been considered. Option 1, which is the preferred option, proposes that the existing sewer pump station at Flamboyant Drive be

upgraded (including new rising main) and rerouted through to the Isipingo Wastewater Treatment Works. The upgrade should take into account the flow of the existing catchment and the additional discharge from the proposed Kanku Road development.

Option 2, which is the least preferred option, proposes that the existing sewer pump station at Flamboyant Drive be upgraded (including new rising main) and rerouted through to the Amanzimtoti Wastewater Treatment Works via the Umbumbulu and Citrus Sewer Pump Stations.

(f) The operational aspects of the activity:

There are no alternative operational aspects to be used in the proposed activity.

4. PUBLIC PARTICIPATION PROCESS

A Public Participation Process was undertaken according to Regulations 39 to 44 of the EIA Regulations as promulgated under the National Environmental Management Act (NEMA, Act 107 of 1998).

4.1 NOTIFICATION OF THE PROPOSED DEVELOPMENT

Notification of the proposed Kanku Road residential development project was conducted through the publication of newspaper adverts in English in the Mercury and Zulu in the Isolezwe on the 29th August 2016, in order to notify Interested and Affected Parties (I&APs) of the proposed housing development project. Refer to appendix E for copies of the adverts.

Numerous notice boards were placed on and around the proposed development site to notify the local public of the proposed development. The notice boards were in English and Zulu and included details of the application, its nature and location, the assessment procedure in terms of the Regulations and details of the EAP. These were placed on and around the site on the 22 August 2016. Refer to Appendix F for the site poster.

4.2 INTERESTED AND AFFECTED PARTIES

A register of I&APs was compiled at the outset of the project. This includes names and contact details of Authorities, Government / Municipal Departments, NGOs, local interest groups, the relevant ward councillor, local residents groups, neighbouring landowners and Isipingo Hills community (Refer to Appendix G). The list of I&APs has been continually updated to include persons responding to the adverts and site notice boards.

4.3 BACKGROUND INFORMATION DOCUMENT

Written notification in the form of Background Information Documents (BIDs) were circulated from 26 August 2016 (Refer to Appendix H). These BID's were circulated by e-mail, post and fax to the local public and relevant authorities. In addition, 80 BIDs were hand delivered to surrounding residencies within a 100m radius of the proposed development site and 500 BIDs were delivered to the Isipingo Hills Residents Group, who distributed them to the Isipingo Hills community.

4.4 PETITION AGAINST THE PROPOSED KANKU ROAD RESIDENTIAL DEVELOPMENT

A petition against the proposed Kanku Road residential development was sent to Green Door Environmental on behalf of the Isipingo Hills Residents Group on 25 October 2016. The Petition was accompanied by 415 signatures/letters of support for the Petition from the Isipingo Hills community. The Petition outlined some of the concerns of the Isipingo Hills residents relating to the proposed Kanku Road low-cost housing development. A copy of the Petition and list of signees are included as Appendix I.

The key concerns contained in the Petition as well as the comments received following circulation of the BIDs, advert in the newspapers and the displaying of site notice boards are summarised and responded to in Table 1 below and hard copies of the comments are included as Appendix J.

Table 1: Comments received following the newspaper adverts, placing of site notice boards, and circulation of the BID.

I&AP	COMMENT	RESPONSE
Mr. P. Mans	The site is within a well-built residential area. It is surrounded by residential	Noted.
Department of Agriculture and	properties.	
Rural Development (DARD)	There is a school to the north west corner of the property.	Noted.
17 March 2016	• The site is currently vacant and the land cover is about 50% grass, mainly to the west and 50% trees to the east of the site.	Noted.
	The site is within a residential area and it appears natural to expand residential development into the open space.	Noted.
	There is no immediate concerns about the proposed development that was observed onsite.	Noted.
	Please be advised that the Provincial Department of Agriculture and Rural Development: Land Use Regulatory Unit requests submissions of all relevant documents required in terms of the relevant sections of NEMA and NWA that applies to the activity to make an informed decision.	Noted. A copy of the Draft Basic Assessment Report has been provided to the DARD for comment.
Nazir Khan	The following issues must be noted:	
Isipingo Resident	I am against the proposal.	Noted.
23 August 2016	Property valuations in the area will drop and there will be higher bank repossessions.	The specialist Socio-Economic Survey (refer to Appendix K) that was undertaken for the project provides mitigation measures to limit negative impacts on surrounding community members and property values. As per the recommendations of the Socioeconomic study, the development architecture and finishes should take into account that of the existing area. The Municipality should regularly inspect the area and more specifically the development to ensure no illegal land use activities take place that could potentially have a negative impact on the community or their property values. In addition, the eThekwini Municipality Environmental Health Services Unit has provided comment stating that the proposed development must be conducted in such a manner as not to impose undue risk or negative impacts

I&AP	COMMENT	RESPONSE
	There will be an increase in hijacking / theft and robberies.	 on the quality of lives of the surrounding residential communities. Should any problems arise, this department has the right to call for further mitigation measures. Noted. The local resident groups must work with the SAPS and Metro Police to devise a safety and security strategy for the area. The community must also be encouraged to establish an active Community Policing Forum.
	There will be an increase in pollution / waste / smell.	In keeping with the current service provision for the area, the proposed residential development will have Municipal waterborne sewage, water, electricity, waste disposal and stormwater infrastructure. Therefore it is highly unlikely that the residential development will result in an increase in pollution, waste and smell.
	 Security fees, which I currently pay, will increase drastically. The traffic will have a negative impact. 	Noted. A specialist Traffic Impact Assessment has been undertaken (Appendix L) for the proposed development. The findings show that the residents of the proposed housing development will largely rely on public transport and a large proportion of trips to and from the development will therefore be on foot. The study concluded that there is sufficient capacity available within the surrounding road network to accommodate the added traffic generated by the proposed development.
	 Currently I pay high rates. This proposed development is unfair. There will be an increase in noise pollution 	 Noted. Noted. Municipal bylaws in terms of noise and unruly behaviour should be implemented. The community should also report such instances to the police

I&AP	COMMENT	RESPONSE
		for action.
	 Why can't parks, nature / recreational facilities, greenery, trees just be left alone, not cut down? 	Noted.
	I am shocked and disturbed.	Noted
Buyani Ngcobo Isipingo Resident 25 August 2016	I would like to inquire about the Notice on a project that Green Door Environmental is involved in and would like to know what it is about. Can you kindly clarify on what the project is about and what it means for us as residents of the area. The state of the	The eThekwini Municipality has proposed the establishment of a high density residential development comprising 360 double story units on Portions 4 and 7 of Erf 2363, Kanku Road in Isipingo. The proposed project will result in the establishment of an infill residential development and the closure and rezoning of an area of Public Open Space.
	The rumour going around is that the project is for RDP housing, is that a fact?	 The project is aimed at providing high density Municipal housing for the residents of the Isipingo Transit Camp which is located approximately 550m to the south of the proposed development site.
Avin Ishwarlall Isipingo Resident 08 September 2016	I oppose the RDP housing project in Isipingo Hills until the following concerns are addressed and resolved in order to accommodate such a project:	Noted.
	 The sewer and storm water systems cannot handle the current load: Whenever we have rains, the storm water and sewer covers on the Old Main Road overflow and result in a stink in the CBD, this is certainly a health and disease factor. Due to the lack of storm water infrastructure in the area it was deemed necessary for residences to construct storm water soak away systems, in my case at a cost in excess of R10k. The blockages of these drainage systems are caused mainly due to the waste materials disposed onto the main road by the informal traders. 	• A site specific Stormwater Management Plan will be implemented to attenuate stormwater runoff at the site to ensure that the post-development runoff will be limited to pre-development levels. The existing sewer pump station at Flamboyant Road is being upgraded to cater for the additional discharge generated from the proposed development. This is being undertaken concurrently, as a separate project.
	 The roads cannot accommodate the current public transport vehicles: The train station is situated in the middle of Isipingo CBD and require taxis and busses to accommodate the train commuters, the bus and taxi rank vehicles often overflow into the main road due to space constraints During peak the main road which serve as the main feeder into Isipingo 	 A specialist Traffic Impact Assessment (Appendix L) has been undertaken for the proposed development. The study concluded that there is sufficient capacity available within the surrounding

I&AP	COMMENT	RESPONSE
	Hills is always congested due to public transport vehicle stop and go, their attitude is another issue. Pedestrian Risks:	road network to accommodate the added traffic generated by the proposed development.
	 Our daily commute through the main road involves us dodging pedestrians who cross the main road from the train station to the public transport ranks. Although fences have been erected several times, these fences keep getting vandalised to create short-cuts at non-designated paths across the main road which often result in pedestrian fatalities, motorist accusation and liability 	Noted. A request to the local ward councillor / Municipality for additional traffic calming in problem areas should be undertaken.
	 Isipingo Hospital is also accessed through this main road, there is no emergency lanes and the traffic congestion does not allow emergency vehicle access 	Noted.
	Primrose Primary School: The primary school adjacent to the proposed site is always exceeding its capacity due to learners being accommodated from Umlazi and other surrounding areas	Noted.
	The vicinity of the proposed dwelling and school will introduce concerns of drugs and illegal substance abuse Community Hall:	The community should be vigilant and report any instances of illegal substance abuse to the police for action.
	 Isipingo Hills does not have a community hall for social and community events 	Noted.
	 For this and other socio/community meetings we have to hire private venues to conduct social and community meetings 	Noted. The community should engage the local ward councillor in this regard.
	 Theft and violent crimes: Isipingo is riddled with various crimes ranging from theft, hijackings and murders which the police can no longer manage All residents are forced to live within enclosed, high walled units to prevent attacks This area is considered a high crime area consequently costing residents high armed response rates from private security companies compared to other areas 	Noted. The local resident groups must work with the SAPS and Metro Police to devise a safety and security strategy for the area. The community must also be encouraged to establish an active Community Policing Forum.
	 Violent Protests: The transit camp dwellers often embark on illegal protests causing even more pressure on the traffic congestions when they burn tyres in the 	Noted. The protests are largely in response to poor living conditions and

I&AP	COMMENT	RESPONSE
	 middle of the main road Passing traffic is always subjected to attack by these protests and could result in life threatening situations Our concern is, will this behaviour continue in the proposed RDP complex and beyond its borders when the incidence of non-payment of utilities occur 	lack of basic services at the transit camp. The proposed residential development project is aimed at alleviating the problems that cause the protest action.
	 Informal Traders: The informal traders on the main road do not make use of bins and create massive amounts of waste that often clog the drainage systems The large number of informal traders along the main road congest the streets resulting in commuters/pedestrians being forced to spill over onto the roads 	Noted.
	 Policing: The police service is virtually non-existent on our streets and the main roads, therefore road users do not follow the rules of the roads including traffic circles and traffic lights When we report an incident to the SAPS we are often told there isn't a vehicle available to attend to a crime scene, we anticipate an increase in incident reports if the number of dwellings has to increase 	 Noted. The community can become more involved in the policing of the area through communication with the local SAPS and Metro Police and establishment of an active Community Policing Forum.
	 Some of these points may not have relevance to your survey however we are hopeful that your organisation will consider these points that currently and will in the future impact the daily lives of the residence of Isipingo Hills. 	Noted. Thank you for your comments.
I&AP 07 September 2016	 As a resident of Isipingo Hills I totally disapprove of the housing establishment being developed in our residential area. Also to note that no acknowledgement was made of this process being done and if it was the lack of notification on this was extremely poor. 	 Noted. The public participation process undertaken for the project has been extensive, as outlined in Section 4 of this Draft Basic Assessment Report.

I&AP	COMMENT	RESPONSE
Mr. Sunil Brijmohan Ward 90 Councillor 08 September 2016	 Just to bring to your attention there was a meeting held last night 07/09/2016. In the voting district where the development is proposed, from my general assessment the surrounding community do not buy into the development for reasons such as crime, environmental impact in terms of roads, etc. But as the Ward Councillor, we are in need of housing development in the area because we face a real shortage in that respect. If we could sit and look at this project more in regards to some of these issues. 	Noted. The major concerns raised by the public during the public participation process such as crime, traffic, lack of service infrastructure, have been investigated and assessed in this Draft Basic Assessment Report.
Paul Ramparsad Isipingo Hills Housing Concern Group 11 September 2016	 As you are aware that I had applied for an extension of time for the community to register on your database and you had given an extension to the 25 October as requested. You did mention in your email that community can also comment after that date and in October a public meeting will be convened by your department. For your information only a handful of resident's were handed with the Background Information Document and thereafter we took the initiative to call a public meeting in a hall on the 7 September and had approximately 150 people were in attendance and was accomplished in a short space of time. 	Noted.Noted.
	 This information was communicated via WhatsApp and Face Book. At that meeting it was decided that we request for extension of time and publication this in the local paper and the others as mentioned in order to get more people from the whole of Isipingo to attend and to provide preliminary comment on this proposal. The WhatsApp group is under Proposed RDP Concerns and the Face Book page under Isipingo District which has approximately 3000 members. 	Noted.Noted.
	 Our aim is to inform and involve all potentially Interested and Affected Parties of the proposed housing development from the very onset. We will be having a committee meeting on Monday 12 September and 	Noted.Noted.
	request the following information: • When was the said housing project approved by the eThekwini Municipality?	We do not have this information as we were appointed to undertake the environmental process for the proposed development and are not involved in the Municipality's internal planning processes.

I&AP	COMMENT	RESPONSE
	When was the tender awarded to your company and amount and when does it have to be complete?	 Green Door was appointed as the independent Environmental Assessment Practitioner during March 2015. However the project has been on hold since then, until August 2016. The environmental process will likely be completed in 2018.
	What progress has been made after your company was awarded the tender to date?	 We have undertaken the public participation process, specialist studies and are now circulating the Draft Basic Assessment Report for comment.
	What step will be taken after you had addressed all the communities concern?	The concerns raised during the public participation process have been investigated as part of the specialist studies and assessed in this Basic Assessment Report. The Department of Economic Development, Tourism and Environmental Affairs (DEDTEA) will consider all comments when issuing a decision on the project.
	Will your company pay for booking of the hall and for security for the next meeting?	 Green Door will hold one public meeting as part of the environmental process, at a suitable location close to the proposed project site. We will cover the cost for that one meeting.
	Will your company provide allowances to committee membersfor assistance in matter, such as running costs etc.?	No. The Applicant for the proposed development is the eThekwini Municipality and not Green Door Environmental. Green Door is the appointed Environmental Assessment Practitioner. The eThekwini Municipality should be contacted in this regard.
	Is this project called a RDP housing project?	 As per the information provided by the eThekwini Municipality, the project is for the development of high density Municipal housing aimed specifically at re-housing residents of the Isipingo Transit Camp located approximately 550m south of the proposed

I&AP	COMMENT	RESPONSE
	 What different aspects falls under environmental concerns if one has to comment? Will your company provide 500 copies the Background Information document for the next public meeting? Please inform why the Background Information Document was sent in August 2016 and not earlier. 	 development site. Environmental concerns include both the physical impacts that will result from the development such as traffic impacts, stormwater impacts, impacts to heritage resources on the site, etc. as well as the socio-economic impacts such as increase in crime, loss of sense of place, devaluation of properties, etc. 500 copies of the BID were provided to Mr. Ramparsad. The BID was circulated from August 2016 because that is when the public participation process commenced.
Paul Ramparsad Isipingo Hills Housing Concern Group 16 September 2016	 We have discussed the content with the committee members and it was suggested that your company provide the BID to all interested parties from inception in order to participate. As you aware that just a handful of resident were given this said document in this first phase of negotiation. It will be impossible for one to fill in the comment sheet without reading the BID. We will object for you to call a meeting when all the Interested parties are not informed. In all fairness and transparency, I request your company to provide me with 500 copies of the BID immediately to avoid your time frame to complete your assessment. 	Noted. Mr. Ramparsad was provided with 500 copies of the BID on 22 September 2016.
Paul Ramparsad Isipingo Hills Housing Concern Group 26 September 2016	 Please inform when was the tender awarded to your company and also inform the reasons for this assessment to be put on hold from March 2015 to August 2016. The Traffic Impact Study is one of the important requirements in this matter. Can you inform me if this is complete and if it is kindly forward me a copy. 	 The project applicant is a government department, the eThekwini Municipality. The project was put on hold by the Applicant due to reasons relating to their internal processes. We do not know the reasons why the project was on hold for that period of time. Green Door was appointed as the independent Environmental Assessment Practitioner during March 2015. The Traffic Impact Study is complete. Refer to Appendix L for a copy of the report.

I&AP	COMMENT	RESPONSE
	Kindly forward me the proposed development layout plan and the site and surrounding plan be forwarded to me separately on a A4 size paper.	Refer to Figure 3 for the updated layout plan.
Paul Ramparsad Isipingo Hills Housing Concern Group 06 November 2016	 We refer to your letter dated the 2nd of November 2016, which is an invitation to the affected residents to attend a public meeting. We, as a committee, are very concerned in the manner in which you called this "public meeting", namely the venue, meeting date and time as well as a very short notification. The meeting was arranged by yourself unilaterally without consulting the above mentioned group. According to our records your company had only circulated approximately 10 flyers within the subjected areas. And it is our opinion that you may not have called a meeting if our group had not registered as an I&AP with your company. To date we have registered approximately 340 (I&AP) objections as well as 15 objection forms were sent directly to your department, all of which are residents of Isipingo Hills. The Lotus Park Hall venue, which you have elected to use, is situated south approximately 5 km away from where the I&AP resides as well as the proposed housing development site. Travel to this venue will not be within walking distance, for most that wish to attend, considering the location. The time and date of your meeting is not realistic as you have chosen a week day at 16h30 which would not suit the average worker who generally leaves work at this time. This would make it extremely difficult if not impossible to attend this important meeting. Due to the location of the Lotus Park Hall, most residents in attendance would require travel via vehicle in car pools and due to peak traffic delays would further hinder their attendance. It seems that your company has not catered for the working class. It is our view that you opted to book this Municipal hall due to there being no charge for the usage. Your company has not yet realised that the hall booked is in another suburb which makes it highly inconvenient for the affected people to attend. You have proposed a hall in situated in another	Green Door Environmental initially proposed having a public meeting on 17 November 2016. All registered I&APs were notified of the public meeting on 02 November 2016. However, based on the comments received from the Isipingo Hills Housing Concern Group the public meeting was postponed to Saturday 25 February 2017, between 14h30 and 16h30 and the venue was changed to the Isipingo Hindi Sabha Sarojini Crescent Hall in Isipingo. This was done to ensure that the date, time and venue for the meeting was acceptable to the majority of the registered I&APs for the project. All registered I&APs were personally invited by fax, e-mail, phone or post on 10 February 2017. In addition to this, SMSs were sent to all registered I&APs who supplied their cell numbers. This ensured that the Isipingo Hills community was extensively notified about the public meeting.

I&AP	COMMENT	RESPONSE
	Isipingo Hills and had paid for hire of these halls by the way of donations.	
	We also quote your reply dated 12th of September 2016, wherein you	
	stated that "Green Door Environmental will hold one public meeting as part	
	of the Environment process, at a suitable location close to the proposed	
	project site. We will cover the cost for that one meeting."	
	We believe that you should abide to your commitment. Further was a second of A.P. and the abite of a second of the second	
	 Furthermore we have contacted I&AP's, which signed the objection forms, regarding the invite to the meeting and we were surprisingly informed that 	
	they had not received any notification from your company for this meeting.	
	 A member of our committee did contact your company to request a 	
	relocation of venue and rescheduling of date.	
	 He was informed by you that the date and venue has been set due to 	
	deadline that needed to be met.	
	How it is possible that deadlines have been set yet your company has not	
	fully inform residents of this public meeting. (i.e. sms, email or public	
	notification via print media).	
	We therefore demand that you do the following:	
	• 1) You immediately cancel the hall booking with the hirer.	
	2) You inform all I&AP of the cancellation.	
	3) You liaise with our committee in order to assist in find a suitable hall class to the prepared site.	
	close to the proposed site.	
	 4) You must inform all I&AP's of the public meeting, within a sufficient notice period and including those people that did not register with your 	
	company.	
	 5) You must clarify your means of advertising this meeting as previously 	
	company took the initiative to invite 10 household only which raised a	
	concern with our committee.	
	6) We recommend that the meeting be called on a Saturday when majority	
	of residents are able to attend.	
	• 7) The commencement time for the meeting should be from 15h00.	
	We have spearheaded the public participation of this project from inception	
	and have done all that we can to get all the residents to register as I&AP.	
	It is therefore our request that you either have the public meeting close to	
	the project site where you can inform the public accordingly.	
	Failing which you can call off the complete exercise taking into Supil Primahan, had informed up	
	consideration that our ward councillor, Sunil Brijmohan, had informed us that the residents of the Transit Camp have be relocated to Cornobia, this	
	was mentioned at a Public Meeting on the 16 of October 2016.	
l.	The mediane at a rabile meeting on the To of Cotober 2010.	

I&AP	COMMENT	RESPONSE
	 If so then may you please inform the I&AP's by emails or sms of this development. It would have been impossible for your company to call this public meeting if we were not instrumental in this exercise. On behalf of the public we wish to inform you that the public has made it clear that they will not attend your scheduled meeting of the 17 November 2016. 	
Paul Ramparsad Isipingo Hills Housing Concern Group 14 November 2016	Further to my email dated 6 November 2016, I wish to inform you that Sub 7 of Lot 2363 Isipingo was registered to eThekwini Municipality from an unknown entity on the 10 March 1981 with no purchase price, according to the deeds office search.	Noted.
	 You can obtain these records from the Deeds Office in Pietermaritzburg. In my view this property was transferred by the developers as part of the township development for a Public Open Space. 	Noted.Noted.
	 According to the Valuation Rolls 2002-2003 and the township plan this property is zoned Public Open Space. You are requested to provide the following: 	Noted.
	 When was this property rezoned to Special Residential 350? Confirm whether there was public participation when the property was rezone. Were all procedures such as Advertising the rezoning in newspapers, notices to adjoining owners of the councils proposal, displaying notice on property and closure of Public Open Space, etc. This matter will not be concluded unless the requested information is not furnished to us by or before the public meeting failing which your company must reschedule the meeting until such time this information is on hand. 	Green Door Environmental is undertaking the environmental authorisation process for the proposed Kanku Road residential development project. We are not involved in the planning application and do not have access to the planning information. We are unable to provide you with the requested information.
Paul Ramparsad Isipingo Hills Housing Concern Group 18 November 2016	 I refer to our telephonic discussion on the 15 November 2016 wherein you informed me that your company had suggested that we should have the public meeting on either the 3 or 10 December and not on the proposed date of the 26th November 2016. You furthermore informed me that there would be posters displaying the 	Based on the comments received from the Isipingo Hills Housing Concern Group the public meeting was postponed to Saturday 25 February 2017, between 14h30 and 16h30 and
	 information of this meeting. It was my understanding that concerned residents could pose questions about this development however this meeting is not a full face to face public meeting where people can question your company's role with regards to this proposal. We put forward a suggestion that there should not be any meetings within the period of December 2016 as this would coincide with the festive period. Kindly consider the end of January 2017 as there will more likely be full 	the venue was changed to the Isipingo Hindi Sabha Sarojini Crescent Hall in Isipingo. This was done to ensure that the date, time and venue for the meeting was acceptable to the majority of the registered I&APs for the project. All registered I&APs were personally invited

I&AP	COMMENT	RESPONSE
	 public participation after the festive period. We do not see the urgency in meeting so soon as we are aware that your company will need to submit your final report to eThekwini Municipality by the middle of 2017. We suggest any Saturday after the third week of January 2017 would be most a convenient date and request that placing sign on the wall will not be accepted as your presentation. The community was previously informed of exactly how your proposal was to be presented which included at least two public meetings. This was included as part of your initial letter from your company, that included the ecologist and the ward councillor Mr Sunil Brijmohan. The community need to understand your proposal and a face to face full public participation meeting is necessary and not small meeting groups. It is your duty to address the affected residents and if need be open a question and answers session. This meeting cannot be substituted by hanging a poster up for all to see as there can be no answers given through a poster. This meeting will most likely be the only meeting your company will be using as a platform to address the community and we would like it to be well attended. The public has forwarded some of their concerns to your and we would like them to be answered during the course of this meeting either in writing or reporting back will be acceptable. All related matters that were sent to your company previously by myself on behalf of the affected community groups will need to be addressed. If these matters are not addressed at this meeting then you will have to call another meeting as an alternative. 	by fax, e-mail, phone or post on 10 February 2017. In addition to this, SMSs were sent to all registered I&APs who supplied their cell numbers. This ensured that the Isipingo Hills community was extensively notified about the public meeting. The public meeting took the form of a formal powerpoint presentation with a question and answer session after the presentation.
Paul Ramparsad Isipingo Hills Housing Concern Group 12 December 2016	 Please be informed that the date suggested by you has to be postponed as majority of the people residing in this area are predominantly Indians. During the latter part of January to mid February 2017 they observe a festival and Prayer (Kavady). The dates we are available for the meeting will be preferably the 18 February 2017 and alternately the 25 February 2017. I suggest you please invite the residents at 2:30 for 3pm to allow for late comers. I have provisionally booked the said hall for these two dates. The hall will be booked and confirmed once you have accepted a date. Furthermore, on the front page of the Daily News on the 9 December 2017, 	 The public meeting was postponed to Saturday 25 February 2017, between 14h30 and 16h30 and the venue was changed to the Isipingo Hindi Sabha Sarojini Crescent Hall in Isipingo. This was done to ensure that the date, time and venue for the meeting was acceptable to the majority of the registered I&APs for the project. The ward councillor was notified of the public meeting well in advance but did

I&AP	COMMENT	RESPONSE
	 "I am in Paradise – Family's delighted at Cornubia home." The ward councillor of the area Mr Sunil Brijmohan made a bold statement that "the remaining 39 families at the Transit Camp would be moved by the end of next month" which is very disturbing and concerning. It seems to us that your department is not informed with most recent development on this housing matter from the eThekwini Municipality. To clarify this issue we insist that the ward councillor and a senior staff member from the Municipality to be invited to this meeting. Public Participation is a crucial and significant aspect as mentioned by in your initial document and in order to obtain residents views in this matter, you are reminded to make sure that all the residents are informed well in advance by either handing flyers door to door or publicising the meeting in the local newspaper which you are mandated to do as per the contract. It was our initiative to register all concerned residents to be put on your database. All those residents that are registered with your company must be also invited as per contact details on the forms at least two weeks prior to the meeting. Please be prepared to answer all questions at the proposed meeting as mentioned in all my previous email failing which you have to call another meeting to verify any outstanding issues that has not been answered by you. In our view it would be a futile exercise to call a meeting in February when all residents from the Transit Camp have been relocated by then which will create further complications in your process. 	not attend.
Paul Ramparsad Isipingo Hills Housing Concern Group 22 June 2017	Please obtain all the documents regarding the rezoning, viz. informing the adjacent neighborhood, advertising, notices on property, meeting with community and all due purposes affecting the community including responses from the community, dates, when and council agenda and minutes during this processes. All documents from the previous owner including transfer documents. This must be forwarded to us urgently.	We are the appointed Environmental Consultants for the project and are therefore only involved in the environmental process, not the planning process. We are unable to provide this information.
Roland Moore Eskom 29 August 2016	This development falls within the Durban Electricity Area of supply. Please submit your BID to them.	Noted.
Terry Stewart eThekwini Parks, Recreation and Cultural Unit 31 August 2016	Please note that the Parks Recreation and Cemeteries department has already stated our opposition to the rezoning and development of this Public Open Space.	Noted.

I&AP	COMMENT	RESPONSE
eThekwini Municipality	eThekwini Transport Authority:	
Consolidated City Comment 28 September 2016	A Traffic Impact Assessment will be required prior to the proposed housing developments.	Noted. A Traffic Impact Assessment has been undertaken (Appendix L).
	The bus / taxi routes must be determined in consultation with the Public Transport Planning Branch of the ETA.	Noted.
	The housing developments must meet the minimum engineering standards for high density residential developments.	Noted.
	The roads pavement design must get prior approval from the Roads Provision Department of the Engineering Unit.	Noted.
	Where practically possible a min 6 m access way must be considered for access to properties.	The cul-de-sac roads have proposed 8/10.5m road reserves with 4.5/7m wide roads. The access ways have proposed 10.5m road reserves with 4.5m wide roads.
	If footpaths are the only option i.e. topographical / environmental constraints it is suggests that approval is sought by reporting to Council and obtaining a Council resolution.	Noted, however the proposed development plan includes access roads.
	 Footpaths to be min 2m within a 3m reserve where practically possible. The title deeds must state that the site does not and will not have vehicular access. 	Noted.Noted. Not applicable.
	 <u>eThekwini Environmental Health Services:</u> This department supports the above development in principle, subject to the following mitigation measures being considered during construction and after construction phase: Noise: 	Noted.
	 Noise levels during construction phase will increase significantly. All mitigation measures to reduce noise levels that would constitute a noise nuisance to the neighbouring communities must be documented prior construction phase and implemented during construction phase. All activities must only operate 08h00 -16h00 to further reduce impacts on the neighbouring communities. Noise emissions must be minimised to comply with SANS 10103:2008. 	Noted. This has been incorporated into the Environmental Management Programme (EMPr). Refer to Appendix M for the EMPr.
	 Dust: All dust mitigation measures must be put in place to ensure minimal impacts to the surrounding residential properties / neighbouring communities. 	Noted. Measures are provided in the EMPr to reduce dust nuisances during the construction phase.

I&AP	COMMENT	RESPONSE
	Building rubble and miscellaneous waste: • All waste material generate during the construction phase must be removed and disposed of at an approved landfill site and in a manner that does not contravene the National Environmental Management: Waste Act of 2008.	Noted. This has been included in the EMPr.
	 General notes: It must be noted that the proposed development is conducted is such a manner as not to impose undue risk or negative impacts on the quality of lives of the surrounding residential communities. Should any problems arise, this Department reserves the right to call for further mitigation measures. 	Noted.
	 eThekwini Electricity: The electricity supply in the area is not adequate to cater for the proposed housing project and new/ additional electricity cables will have to be installed to cater for the proposed development. An Electricity Substation Site (ESS) will be required in the proposed development by eThekwini Electricity. The ESS shall be approximately 15 metres in width and 10 metres in depth and will be required to be registered in favour of eThekwini Electricity and to be with a road frontage, preferably in the vicinity of the proposed roundabout. Please not that to receive a full clearance from the Electricity Unit the applicant needs an approval from MV/ LV Operations (Southern Planning). 	Noted.Noted.
	 eThekwini Water and Sanitation: The development will consist of approximately 400 residential units. This will generate a wastewater flow rate of approximately 10 litres per second. The increased flow could require the upsizing of the gravity sewer pipes to Avenue East pump station, which is operating at capacity and this will also need to be upgraded both in terms of sump capacity and increasing in pumping rate. 	 Noted. Noted. The EAP has been informed that the upgrading of the existing sewer reticulation is being undertaken concurrently, as a separate project.
	 In addition a check would be needed on the capacity of the pumping main from the Avenue East PS to the WWTW. <u>Durban Solid Waste:</u> The development must ensure that the designs of the roads are suitable for refuse trucks with a poor turning circle and a 10.2 ton legal axle load. 	Noted. Refer above.Noted.

I&AP	COMMENT	RESPONSE
	 Strategic spatial planning: No objection to the proposed land us as it aligns with the spatial intentions of the City's strategic plans. However, the proposed density of 100 du/ha does not align with the Isipingo Local Area Plan (ILAP) which recommends a net density of 40 du/ha. It is recommended that the density be aligned to the ILAP. 	 Noted. Noted. This has been communicated to the Applicant.
	 Environmental Planning and Climate Protection Department: No objection to the proposed development. Attention is drawn to the following matters: The following listed activity in terms of the EIA regulations applies (and not 12(b)(v)) as indicated in the BID: 12(b)(vii). 	Noted.Noted.
	As the project will result in a net loss in public open space, and as the purpose and need for the development is to provide permanent housing for the occupants of the Isipingo Transit Housing Facility, the following aspects will require attention in the EMPr, and commitment from the Human Settlements Unit regarding implementation thereof: • A relocation plan for the movement of beneficiaries from the transit facility	 Noted. To be provided by the Applicant.
	 to the project. Demolishment of structures and disconnection of services at the transit facility. 	Noted.
	 Waste management plan associated with the above. Rehabilitation of the wetland area upon which the transit facility was established. Special attention to be paid to rehabilitation and conservation of the riparian area and the portion of the site currently zoned as open space. 	Noted.Noted.
	 Plan for preventing future invasion of the transit camp during relocation, and invasions after the site has been rehabilitated. 	Noted.
Michele Nicol Eskom 30 September 2016	Eskom has no infrastructure crossing this portion, thus we have no objection.	Noted.
Kamal Singh Isipingo Resident	The following issues must be noted: • Destruction of indigenous vegetation / plant life / trees. Threat to birdlife	Noted. This has been assessed in the
26 September 2016	 and wildlife. Water and electricity strain. Sanitation concerns. 	 specialist Biodiversity Assessment (refer to Appendix N). Noted. This has been assessed in the specialist Civil Design Report (refer to

I&AP	COMMENT	RESPONSE
	 Further congestion to traffic flow. Low cost housing would devalue an area that is declared special residential, where higher Municipal rates are currently being levied. 	 Appendix C). Noted. This has been assessed in the specialist Traffic Impact Assessment (refer to Appendix L). Noted.
	Pollution would reach uncontrollable levels due to the large number of residents.	The proposed residential development will have Municipal waterborne sewage, water, electricity, waste disposal and stormwater infrastructure. Therefore it is highly unlikely that the residential development will result in uncontrollable levels of pollution.
Residents of Sarojini Crescent 22 September 2016	We the people of Sarojini Crescent Isipingo Hills strongly object to the proposal establishment.	Noted.
22 September 2010	 The community was not consulted on the proposal, as with the transit camps as well. And as you can see what disaster that turned out to be. 	Noted.
	We already have high crime rates, robberies; break ins, hijackings, just to name a few, since the inception of these camps.	Noted.
	 We have first-hand experience on service delivery strikes burning roads, tyres, destruction of property. 	Noted.
	How can you guarantee that all of the above will not occur.	This cannot be guaranteed however recommendations have been included in the specialist Socio-Economic Survey study (appendix K) and this Basic Assessment Report to manage and mitigate negative socio-economic impacts.
	Property value will decrease.	Noted.
	Why choose an area that is already developed?	Due to the lack of available space for housing projects, the eThekwini Municipality has little choice but to establish infill housing developments on vacant properties in established residential areas, to try to alleviate the housing shortage in the greater Durban area.
	We know that everyone deserves a right to shelter and proper living	Refer to Section 3 of this Basic

I&AP	COMMENT	RESPONSE
	 conditions. Please there are many areas that's not developed consider those areas. Isipingo has limited space greenery so why take away the little that we have. 	Assessment Report for information on property alternatives. • Noted.
Isipingo Hills Residents Group 25 October 2016	 Petition against proposed Isipingo residential development: A high density residential development of 400 houses is proposed by eThekwini Municipality on Sub 4 and 7 of Lot 2363, Isipingo, off Kanku Road to accommodate an estimated 750 families, who are currently housed in a transit camp on the floodplain of the Isipingo River, adjacent to the river's northern active channel bank, 689 m south of Sub 4 and 7. A deficit of 350 houses exists to accommodate the remaining 350 families. The development comprises 40m² semi-attached double storey houses on 55m² erven with waterborne sewage, water, electricity, stormwater drains and access roads. The developments entrance will be on Kanku Road. Housing density will be greater than 98 houses per ha (or per 10 000 m²). 	Noted. The proposed layout plan has subsequently been amended to include 360 units on 50m² floor space.
	Sub 4 of Lot 2363 is zoned as Public Open Space. During an initial site inspection conducted on Saturday 1 st October 2016, on behalf of Isipingo's concerned residents, it was strikingly evident that Sub 4 has not been maintained by eThekwini Municipality for many years and consequently has become unsuitable for public recreational use. This probably contravenes the Municipality's own regulations. More seriously, declared Category 1 and 2 plant invaders, have been allowed to become dominant here in contravention of the National Environmental Management Biodiversity Act, No. 10 of 2004 (NEMBA). A range of indigenous KwaZulu-Natal Coastal Forest species and associated biodiversity, including mammal, bird, reptile, amphibian and invertebrate species are present, despite the long-term neglect by eThekwini Municipality.	Noted. A specialist Biodiversity Assessment has been undertaken which shows the site to have little indigenous biodiversity remaining. Refer to Appendix N for the Biodiversity Assessment report.
	 Two graveyards occur along the northern boundary of Sub 4, one containing graves dating back to the 1800's and another containing recent graves. Continued access will be required to the cemeteries, together with at least a 5 m development restriction zone measured from the boundary of the cemeteries. 	Noted. The specialist Heritage Impact Assessment (Appendix O) has recommended a 30m buffer be established around the Isipingo Cemetery. The Dick Kind Graveyard is located approximately 90m from the proposed development site.
	Sub 7 of Lot 2363 is zoned as Special Residential 350 and is largely covered by grassland, with indigenous KwaZulu-Natal Coastal Forest species in the eastern section. A range of biodiversity associated with	The Biodiversity Assessment has shown the eastern portion of the site to be dominated by alien tress species. Most

I&AP	COMMENT	RESPONSE
	grassland and KwaZulu-Natal Coastal Forest is present here, including mammal, bird, reptile, amphibian and invertebrates species.	of the indigenous biodiversity on the site has been lost.
	Declared Category 1 and 2 plant invaders are present in Sub 7 as well as that should have been removed by eThekwini Municipality according to NEMBA.	Noted. An alien vegetation control programme is included as Appendix E of the EMPr (Appendix M).
	The proposed 4.096 ha development area falls within an irreplaceable Critical Biodiversity Area designated by Ezemvelo KZN Wildlife that by definition has a high conservation value and is considered critical for meeting biodiversity targets and thresholds, which are required to ensure viable populations of species and the functioning of ecosystems. Although the grassland on Sub 7 still has to be classified in terms of vegetation type and conservation status, KwaZulu-Natal Coastal Forest is Critically Endangered with only 1 614 ha (50.8%) remaining in 2008, and 250.6 ha (7.9%) having statutory protection in Protected Areas. The conservation target of 2 276 ha (71.69%) has not been met. The critical development area for the conservation of this forest and its associated biodiversity, once it has been rehabilitated and cleansed of declared plant invaders.	Noted, however, most of the biodiversity on the site has already been lost. The vegetation present on the site is not representative of KwaZulu-Natal Coastal Forest vegetation (refer to Appendix N).
	 According to the Background Information Document (BID) prepared by Green Door Environmental, the environmental consultancy appointed by eThekwini Municipality to address environmental aspects relating to the proposed development, it will be necessary to delist Public Open Space (Sub 4), rezone Sub 4 and 7 to Special Zone 34 and consolidate Sub 4 and 7. In terms of the Environmental Impact Assessment Regulations of 2014 promulgated under the National Environmental Management Act, No. 107 of 1998 (Government Notices R982, 983 and 985), the development will have significant negative impacts on the environment, including the permanent loss of potential plant and animal species of conservation concern, other biodiversity and Public Open Space. These negative environmental impacts trigger at least three Listed Activities, which require a Basic Assessment (BA). 	Noted, however there are no plant and animal species of conservation concern present on the site. The site is completely surrounded by cleared areas and structures and has no remaining ecological links to adjacent areas with conservation worthy features (refer to Appendix N).
	An important part of the statutory responsibilities of Green Door Environmental during the BA process is the identification of alternative locations for the proposed high density residential development, besides Sub 4 and 7.	Noted. Refer to Section 3 of this Basic Assessment Report for information on alternatives.
	Although a wetland assessment was conducted by Sivest on 15 th October	There are no wetlands or watercourses

I&AP	COMMENT	RESPONSE
	 2014, and no wetlands were found to be present, Sub 4 and 7 need to be assessed again for possible seepage wetlands, which may be present. Regardless of this, a wetland and drainage line are present approximately 334 m south of the proposed development area on the floodplain of the Isipingo River that will require a wetland delineation, health and functional assessment, together with a drainage line assessment, as they fall within 500 m of the proposed development. The wetland and drainage line assessments are necessary for a Water Use License Application. 	located on the proposed development site. The site is surrounded by residential areas and is hydrologically isolated from any surrounding wetlands and watercourses. However, as there are wetlands located within 500m of the site a Water Use License Application is being undertaken. Refer to Appendix P for the Wetland study.
	 Other necessary specialist studies will include the following: A full and proper biodiversity assessment, and not just a 'Biodiversity Comment' as stated in Green Door's BID; Heritage Impact Assessment; 	 Noted. This has been undertaken (Appendix N). Noted. This has been undertaken
	Traffic Impact Study;	(Appendix O).Noted. This has been undertaken (Appendix L).
	A Geotechnical Assessment;	 Noted. This has been undertaken (Appendix Q).
	Engineering Services Report;	 Noted. This has been undertaken (Appendix C).
	Stormwater Management Plan; and	 Noted. This has been undertaken (Appendix D).
	 A Socioeconomic Impact Assessment should be undertaken to determine the impacts of the proposed high density residential development on the surrounding and Isipingo Hill residential areas. 	Noted. This has been undertaken (Appendix K).
Mr Tesendran Naidoo Isipingo Resident 16 September 2016	The following issues must be noted: • The lack of infrastructure in Isipingo not to mention service delivery.	Noted. Service provision has been addressed in the specialist Civil Design Report (Appendix C).
	 The increased housing will put a heavy strain on the traffic and already lacking service delivery. 	 Noted. This has been assessed in the Traffic Impact Assessment (Appendix L).
	Crime is already an issue and will definitely increase in the area.	Noted. Recommendations have been included in the specialist Socio-Economic Survey study (Appendix K) and this Basic Assessment Report to limit any negative socio-economic impacts.
	 Your company already has sketchy past and I understand this is a formality 	Green Door Environmental is an

I&AP	COMMENT	RESPONSE
	but I assure you the community will do everything in our power to expose this company and the immoral way its business is conducted.	independent organisation appointed to undertake the Environmental Authorisation process for the proposed residential development. We are independent and are not linked to the Applicant in any way. The environmental Basic Assessment Process is a legal requirement and is not being undertaken as a formality.
Mr Ruben Pillay Isipingo Resident 28 September 2016	All vehicles exiting the proposed site will have to travel in some direction to reach the main exit point. The traffic at the main exit point will become a traffic 'nightmare'. This will also mean that public transport (i.e. taxis, buses, etc.) will be driving in and out the area causing havoc.	Noted. This has been assessed in the Traffic Impact Assessment (Appendix L).
	 Our natural biodiversity cleans our water and air, prevents flooding and holds our soil in place. These services are amazingly effective and provided at no financial cost. 	Noted.
	 Our natural environment provides us with a place for our children to learn about and experience nature, 	Noted.
	 It is valuable in and of itself, just as any person or life has value. Where a species of animal or plant occurs nowhere else in the world we have a particular responsibility to ensure its survival. 	Noted.
	The new development will cause additional noise and unwarranted disturbance. I will no longer be able to enjoy my property the same way I'm currently doing.	The specialist Socio-Economic Survey (Appendix K) and Basic Assessment Report provide recommendations to limit noise and other negative socioeconomic impacts. Municipal bylaws in terms of noise and unruly behaviour should be implemented. The community should also report such instances to the police for action. The proposed development is to be conducted is such a manner as not to impose undue risk or negative impacts on the quality of lives of the surrounding residential communities.
	 The value of my property and those in the area will drop drastically due to the low cost housing overshadowing the current houses. This new development will stand out like a sore thumb and this is merely because the houses around the new development is built too much higher standards 	As per the recommendations of the Socio-Economic study, the development architecture and finishes should take into account that of the existing area. The

I&AP	COMMENT	RESPONSE
	 The new development is impractical in its current location. In terms of public transport, the current road layout is not able to handle excessive volumes of traffic. There is already traffic congestion in Isipingo hills and this will make matters worse. A survey must be carried at the following intersections due to traffic congestion at these times 6:00a.m to 8:00a.m; 5p.m to 7p.m: Platt Drive, Saunders Avenue. 	Municipality should regularly inspect the area and more specifically the development to ensure no illegal land use activities take place that could potentially have a negative impact on the community or their property values. Noted. This has been addressed in the specialist Traffic Impact Assessment (Appendix L).
	In terms of recreation facilities, there is only 1 public swimming pool which is already overcrowded. There is only 1 Public Library which services other communities as well, e.g. Isipingo Hills, Isipingo Rail, Lotus Park, Orient Park, Westmont. There is only one Mosque, two Temples and two 2 Churches. There are only three Primary Schools and one High School and they will become overcrowded.	Noted, however, the existing Isipingo Transit Camp residents are the target beneficiaries of the proposed Kanku Road residential development. The transit camp is located approximately 550m from the proposed development site. As such, the transit camp residents are already utilising the schools and other facilities in the Isipingo area and will continue to utilise these facilities should the project receive approval and the transit camp residents are relocated to the proposed development site.
	The current plan is not sufficient for an average family of four. In terms of providing proper homes for these residents, it is impractical for a family of four to live in an undersized house. This does not resolve their current situation.	Noted. The proposed development adheres to Municipal regulations and bylaws regarding living standards.
	The preservation on ancient monuments (E.g. Dick King tombstone) has been in the area for generations and there will be many memories lost if this is overshadowed by houses. There is potential risk of these monuments being vandalized/ tarnished.	The Dick King Graveyard is located approximately 90m from the proposed development site. A 30m buffer has been recommended around the Isipingo Cemetery which is located adjacent to the development site. Fencing off the cemetery has also been recommended.
	The trees are also hundreds of years old and should be retained. This not only helps provide Oxygen, it also cleans the air. Loss of natural habitat for	Noted. This has been assessed in the specialist Biodiversity Assessment

I&AP	COMMENT	RESPONSE
	 wildlife. Birds, Monkeys, insects, etc. All reside in this natural environment, if we destroy years of natural environment we will end leaving these animals homeless and some may even die. Existing traffic will not be able to move freely. The safety of pedestrians will be compromised as this is their daily route to and fro shops, schools, place of worship, etc. The proposed new road is in a dangerous location as the current traffic flow is a nightmare. This poses even more risk for the people 	(Appendix N). Noted. This has been assessed in the Traffic Impact Assessment (Appendix L).
	 using this route. Existing roads, parking facilities, public transport, electricity, water and sewerage systems etc. cannot cope with a new development or will be overloaded. This is a new planned development and does not fit in with the existing development. The overall character of the area will be changed resulting in a mixture of semi-detached, double-story, single story, townhouse, etc. in its surrounding area. 	 Noted. This has been assessed in the specialist Civil Design Report (Appendix C). The development architecture and finishes should take into account that of the existing area. The Municipality should regularly inspect the area and more specifically the development to ensure no illegal land use activities take place that could potentially have a negative impact on the community or their property values.
	One cannot build on a green belt site	 Noted. A rezoning application is required.
Mrs. Devagie Naicker Isipingo Resident 25 October 2016	 The following issues must be noted: Traffic congestion at Platt Drive intersection. Roads not wide enough for such volumes of traffic. 	Noted. This has been assessed in the Traffic Impact Assessment (Appendix L).
Govinda Pillay Isipingo Resident 25 October 2016	This project must be stopped. More violence, and robberies going to happen. Our home values will drop. A place we living for over 20 years will go in vain to these low cost homes.	Noted.
Priscilla Govender Isipingo Resident 25 October 2016	This is not right. Green Forest must remain. Rather open an amusement park for family as we don't have one.	Noted.
Rumba Naicker Isipingo Resident 25 October 2016	There will be too many people in such a small area. I object as per petition.	Noted.
Artwell Isipingo Resident 25 October 2016	We are quite safe at the moment and do not want any trouble.	Noted.
Wesley Naidoo Isipingo Resident	We do not agree on them coming here, for this is a clean and safe environment.	Noted.

I&AP	COMMENT	RESPONSE
25 October 2016		
Mr. Shaffee Mahomed	The following issues must be noted:	
Isipingo Resident	The destruction of plant and tree life.	Noted.
25 October 2016	The increase in pollution i.e. land, noise and air.	Noted.
	The escalation in crime.	Noted.
	Increase in traffic, both human and vehicles.	Noted.
	The devaluation of all property around the proposed project.	Noted.
Jay Naidoo	The following issues must be noted:	110100.
Isipingo Resident	Overpopulation of the area.	Noted.
25 October 2016	Crime on the increase.	Noted.
20 000000 2010	Pose a health risk.	Noted.
	 Lack of facilities e.g. schools and sports amenities. 	Noted.
Mr. Evan Naidoo	The proposed site on which construction is to take place is one of the few	Noted. Noted. This has been assessed in the
Isipingo Resident	areas in the area that contains dense vegetation which will be lost.	Biodiversity Assessment (Appendix N).
25 October 2016	The residents located at the transit camp are known to carry out protests	Noted.
25 October 2010	which lead to chaos and destruction of property.	• Noted.
		Noted.
		Noted. Noted.
	It is widely known that 'whonga' is very common at the transit camp, many current original in the area are being committed by 'whonga' addicts.	• Notea.
	current crimes in the area are being committed by 'whonga' addicts.	- Matad
	Should the relocation take place, there will be a huge spike in the crime sets in the Islanda area.	Noted.
Mr. Kamarai Damahuran	rate in the Isipingo area.	Marad
Mr. Kemraj Ramchuran Isipingo Resident	I feel the ANC has sold us out by accepting a candidate like you (ward	Noted.
25 October 2016	councillor) to represent me.	
Farzana Khan	There was no discussion held with residents. The people who are bidding	Noted.
Isipingo Resident	for the tenders do not reside in Isipingo Hills. Currently high rate of crime,	• Notea.
25 October 2016	burglars, hijacking from squatter camps.	
Mrs. Narisha Hemwanth	This open area should be left to the animals and birds that live there.	Noted.
Isipingo Resident	· ·	
25 October 2016	Trees in our area are so beneficial to us humans to maintain the oxygen levels and so forth.	Noted.
25 5510561 2010		Noted.
	I feel that developing this area is going to do more damage than good. There is a group to go and lead to the total and the state of the state	. 1010 0.1
	There is so much vacant land without trees and plants that can be developed for their formilles.	Noted. Refer to Section 3 of this Basic
	developed for their families.	Assessment Report for information on
Miss S. Vanmari		property alternatives.
	I am against this plan, it will disrupt my peace in this neighbourhood and The state of the state o	Noted.
Isipingo Resident	put pressure on local residents. Use this space for local people already	
25 October 2016	here.	Noted
Miss. Yash Vanmari	Transit camp has brought in enough trouble. Move them to the initial	Noted.

I&AP	COMMENT	RESPONSE
Isipingo Resident 25 October 2016	proposed area. Do not disrupt our lives.	
Miss. G. Vanmari Isipingo Resident 25 October 2016	 I completely oppose this development plan. We pay high rates, the plot in question can be utilised for the purposes of the local residents we deserve a development that serves us e.g. park and recreation area. It is our right to use this land for us exiting rate paying Isipingo residents. 	 Noted. Noted. Refer to Section 3 of this Basic Assessment Report for information on alternatives. Noted. The property is owned by the eThekwini Municipality.
Mr. Baboolal Vanmari Isipingo Resident 25 October 2016	Disruption in the peaceful neighbourhood. Inviting crime to our neighbourhood.	Noted.
Mr. Sanveer Hemwanth Isipingo Resident 25 October 2016	 I think land should be found in another area for housing. So many animals live here and snakes and birds. So many lives will be destroyed, many old and new graves will be destroyed. 	 Noted. Refer to Section 3 of this Basic Assessment Report for information on alternative properties. Noted. The Heritage Impact Assessment (Appendix O) includes recommendations to protect the cemeteries within the vicinity of the development site.
Shamal Hemwanth Isipingo Resident 25 October 2016	 Wildlife exists in designated areas. If removed to build houses, the ecosystem will be destroyed and put animal life in danger (extinction). If Municipality looks, there are so much other areas with no trees and wildlife to be destroyed, so build there. 	Noted. This has been assessed in the Biodiversity Assessment (Appendix N).
Mr. Sadha Govender Isipingo Resident 25 October 2016	Frightening leadership crisis in our zone previously and presently. Firstly taking away our mother nature is not quality efforts. Relocating human kind in a small site with 750 family which have school close by is not the best solution. Show some respect for our people as the youth who will also reside here are our future. Give them enough space where they could have recreation sites also.	Noted. The proposed development includes a recreational area.
Devarannie Sankariah Isipingo Resident 25 October 2016	Please don't build in our quiet neighbourhood. We bought in Isipingo Hills for the quietness of this town. Those houses and the amount of people will disrupt our quiet neighbourhood. I object as per the petition.	Noted.
Shaffe Fayers Isipingo Resident 25 October 2016	Loss of area regarded as 'open space', home to vervet monkeys.	Noted.
F. Mahomed Isipingo Resident 25 October 2016	 People breathing in air that is not clean and fresh leads to lots of illnesses. There will be no 'open space' for oxygen. The roads are built to accommodate the residents in the area and there are 33 units of flats being built and the proposed 400 houses will become very 	 Noted. Noted. This has been assessed in the Traffic Impact Assessment (Appendix L).

I&AP	COMMENT	RESPONSE
K. Paraman	dangerous for our children or pedestrians on the road. Added motor vehicles out of sucrose onto the old main road. At present there are many accidents at the intersection (flatt, sucrose and old main road). As it is we get taxis driving on the oncoming side of the road. • As it is, the sewer man holes have been raised because it used to overflow onto the road. Now it would be worse with stink and pollution. • What would happen to these beautiful birds in the proposed area? I have seen them, I have also seen huge owls in the area where would they go? • We need a recreational area for our children and youngsters who play football on the road. Some youngsters train and exercise on the road. • The access roads to these proposed houses are too small and narrow. It	 Noted. Noted. Refer to the Biodiversity Assessment (Appendix N). Noted.
Isipingo Resident 25 October 2016	will cause chaos on our roads. I object as per the petition.	. 13.33.
Pari Pillay Isipingo Resident 25 October 2016	Definitely no to the RDP Kanku Road houses. When the transit camp people are angry they have been known to burn and blocks our roads. This type of people can't live next to us or so close to us. They don't talk, they burn.	Noted.
Mr. Thabo Molefe Isipingo Resident 25 October 2016	 At the moment there is no crime in the area. How will Government keep crime at zero? How will Government make sure that there is mutual understanding between the two parties i.e. new and old citizens. The Government must make sure that the extended families of the old citizens get priority when allocating houses. We must get the report of the EIA. 	 Noted. The Basic Assessment Report has been made available to all registered I&APs for comment.
Mrs. Aumathie Sewnarain Isipingo Resident 25 October 2016	 Property value will drop in the area. A quiet suburb will now become dangerous. This will cause havoc in society as these dwellers will cause problems and fight for service delivery. Our houses will fall victim of crime and we will have no choice but to flee. 	Noted.
Navendra Ramsander Isipingo Resident 25 October 2016	 The site is the only open space in Isipingo Hills should be made into a park. All wildlife currently living there will be destroyed including our national bird, the blue crane which nests their annually. With all the pollution from industry in prospection, this green area is priceless in providing clean air. Socioeconomic issues, including drug abuse. Roads not capable of handling extra volumes of traffic. Currently at our capacity at the moment. 	 Noted. Refer to the Biodiversity Assessment (Appendix N). Noted. Noted. Refer to the Traffic Impact Assessment (Appendix L).
Mr. Musthakeem Sulaman Isipingo Resident	 Proposed site is a natural habitat for indigenous species and is reliant on the particular environment to exist. 	Noted. Refer to the Biodiversity Assessment (Appendix N).

I&AP	COMMENT	RESPONSE
25 October 2016	The services will be strained by an increase of 400 houses.	Noted.
	Sucrose Road/ Sykens Road/ Saunders Avenue/ Platt Drive will be more	Noted. Refer to the Traffic Impact
	congested than it already is.	Assessment (Appendix L).
	Crime stats have shown that crime is more rampant around such	Noted.
	development.	
	 The schools primary and secondary within Isipingo Hills/ Rail/Beach is already operating at maximum capacity. 	Noted.
Mr. Mahomed Sulaman	Devastation of property is imminent and property renters should be	Noted.
Isipingo Resident	consulted. Safety and security of the surrounding Isipingo Hills area will be	
25 October 2016	more risky/ dangerous than it already is. The people in transit camp have	
	their own homes at the farms. The only reason they are here is Zuma promised them free homes.	
	 Ecosystem is established in the area proposed. 	Noted. Refer to the Biodiversity
	There will be increase in crime.	Assessment (Appendix N). Noted.
	 Traffic congestion at the bottom of Platt Drive is bad and will get worse. 	Noted.Noted. Refer to the Traffic Impact
		Assessment (Appendix L).
	We do not need tyre burning protesters, it's a health hazard and air pollution.	Noted.
Mrs. Whaseela Amod	There will be an increase in crime as many of these residents are	Noted.
Isipingo Resident	unemployed.	140100.
25 October 2016	Traffic congestion at the bottom of Platt Drive will increase causing delays.	Noted. Refer to the Traffic Impact Assessment (Appendix L).
	The value of my property will decrease.	Noted.
	 Disturbance to nature the animals natural habitat. 	Noted.
Mr. Ahmem Amra	The value of our house will be dropped.	Noted.
Isipingo Resident	Security issues.	Noted.
25 October 2016	Protests will increase.	Noted.
Dennis Baker Isipingo Resident	I say no to this development since the transition camp has been there crime in Isipingo Hills has increased.	Noted.
25 October 2016	 Our people is constantly invaded and belongings stolen. 	Noted.
Natanya Paruman	This type of houses has previously proved to be detrimental to the	Noted.
Isipingo Resident	neighbouring homes. Rather build few homes in an area that the	140100.
25 October 2016	communities will not make the residents unhappy. This is not good for us.	
	We pay high rates.	
Mr. Lall	We the residents of Isipingo Hills object to the transit camp moving to	Noted.
Isipingo Resident	Isipingo Hills, instead move to Cornobia housing project. Rather create a	
25 October 2016	professional sports-centre or elderly care centres. We are residents for 50	

I&AP	COMMENT	RESPONSE
	years.	
Kathija Khan Isipingo Resident 25 October 2016	Currently we are overcrowded. No discussion was held with the community. This is currently overcrowding our areas bringing in criminal dements in our areas. Increased break-ins, burglars and hijacking.	Noted.
Mrs. F Shaik Isipingo Resident 25 October 2016	We don't want crime in the area. House breakings will increase.	Noted.
M. Naicker Isipingo Resident 25 October 2016	No, it is our one of very few green pieces of land left. Trees help with oxygen. Too much pollution from neighbouring industries.	Noted.
Shabeer Ibrahim Isipingo Resident 25 October 2016	No to development. Our safety is at stake.	Noted.
Mr. Thasigamoney Naicker Isipingo Resident 25 October 2016	 Traffic congestion at Platt Drive intersection. Roads too narrow for volume of traffic. 	Noted. Refer to the Traffic Impact Assessment (Appendix L).
Mrs. Thembani Mbambo Isipingo Resident 25 October 2016	I don't agree for this piece to be used as a high density residential development because crime rate will increase in the area; our children as residents do not have a ground or park to play, instead they use roads which is dangerous to them; value of our houses will decrease.	Noted.
Mr. Dedele Xulu Isipingo Resident 25 October 2016	 As community members we are not happy about the building of government houses to our community because we will experience theft, car hijacking, drugs. There is monkeys that use this space to stay, where are they going to stay 	Noted.Noted. Refer to Biodiversity Assessment
	 if you build houses there? It is important to take into consideration that we are paying bonds and expenses what is going to happen to the value of our houses in the next 5 years so we feel that it is not fair in our side we cannot pay so much and our neighbours are staying for free. 	(Appendix N). Noted.
Mr. Ishwar Mahabeer Isipingo Resident 25 October 2016	 Increased volume of traffic on Sucrose Road and Platt Drive, which is at present very congested. Drop in value of all surrounding properties. Proposed development will remove trees that have been in the area for 	 Noted. Refer to the Traffic Impact Assessment (Appendix L). Noted. Noted. Refer to Biodiversity Assessment
Clinton Chanderpal Isipingo Resident 25 October 2016	 more than 40 years. The proposed development borders my property and is one of the few open spaces that has trees and monkeys and other animals. Replacing this open space with compacted 750 families from the transit camp will impact negatively on us. 	(Appendix N).Noted.Noted.

I&AP	COMMENT	RESPONSE
	 Those families when unhappy have been known to riot, burn and destroy our roads. If they live right next to me and is unhappy what will they resort to? 	Noted.
	 Possibly burning and destroying and harming my family. 	Noted.
Vianca Chanderpal	The peace and tranquillity of our neighbourhood will be disrupted.	Noted.
Isipingo Resident 25 October 2016	 This is only one of a very few open spaces that has trees and animals e.g. monkeys. The trees help with oxygen especially with so many industries in the vicinity. 	Noted.
	 The proposed development is right in the middle of an old established residential community. 	Noted.
	I object as per petition.	Noted.
Mr. Jon Moopen Isipingo Resident	 It is the only open space for residents bordering the property (approx. 200 houses, a school and a community temple). 	Noted.
25 October 2016	• It has a restricted entrance via existing residential properties that will cause congestion and chaos during peak hours.	 Noted. Refer to the Traffic Impact Assessment (Appendix L).
	 It is home to a variety of plant, animal, bird and insect species that thrive there. 	Noted. Refer to Biodiversity Assessment (Appendix N).
	It is a small ozone friendly green area for healthier living.	Noted.
Mrs. Roshini Singh	Increase in crime and petty theft.	Noted.
Isipingo Resident 25 October 2016	 Presently most residents of Nilgiri Crescent pay for private security guards to keep the area safe for its residents. 	Noted.
	 Destruction of roads and property when and if there are protests as is the case presently in the transit camp. 	Noted.
	Decrease in valuation of our property, we are pensioners.	Noted.
Jayseelan Pillay	NEMA: additional fires, dumping, sewer leakages, noise etc.	Noted.
Isipingo Resident	Social crisis: crowded, influence on youth, drugs, shebeens etc.	Noted.
25 October 2016	Crime rate: major problem already.	Noted.
Pulunthiran Veerasamy	Sewage, road/ traffic, schools etc. will not cope with such high density.	Noted.
Isipingo Resident 25 October 2016	Old grave site is on or near this site, heritage concerns.	 Noted. Refer to Heritage Impact Assessment (Appendix O).
	Crime rate will definitely increase, already bad.	Noted.
	Strongly object with the project going ahead.	Noted.
Mr. Nkanyezi Mbokazi Isipingo Resident 25 October 2016	Against this development and propose something that will development our community instead.	Noted.
Mr. Skhumbuzo Mbokazi Isipingo Resident 25 October 2016	 We are unhappy about the proposed establishment and we are against it and are willing to offer our support to try and stop this proposed establishment from taking place. 	Noted.

I&AP	COMMENT	RESPONSE
	There's too much negativity and chaos that will result through this establishment/residential development, put as residents and rate payers in danger and our area (Isipingo Hills) will decrease in value and so on.	Noted.
Mrs. K Khan	Increase in hijacking/theft/robberies.	Noted.
Isipingo Resident	Security fee's increase.	Noted.
25 October 2016	Traffic have a negative impact.	Noted.
	Increase in pollution/ waste/ smell.	Noted.
	Increase noise pollution.	Noted.
	Property valuation.	Noted.
Mr. Rasheen Gungadeen	Overpopulation: too many people in one area which leads to unnecessary	Noted.
Isipingo Resident	loitering and then brings up the issue of safety and noise pollution.	
25 October 2016	We live in an area that quiet and where we have our own privacy.	Noted.
	Pollution, is an issue everywhere, by increasing the population so	Noted.
	drastically the pollution in the area is also going to increase.	
Mr. Shan Hemwanth	Open space, this is the only open space in Isipingo Hills that we have	Noted.
Isipingo Resident	which is home to so many animals and bird life.	
25 October 2016	It has been home to about 40 to 50 monkeys. What will happen to them if this area is developed.	Noted. Refer to Biodiversity Assessment (Assessment in N)
	this area is developed?	(Appendix N).
	The trees and plants that is here is needed for us to sustain fresh air.	Noted.
	• I am a resident for this area for the past 30 years and I have seen so many different types of snakes and birds and I feel that this open space should be left to these animals.	Noted.
	Land can be found in another area for this development.	 Noted. Refer to Section 3 of this Basic Assessment Report for information on alternative properties.
Sharleen Hemwanth Isipingo Resident 25 October 2016	 My concern is what is going to happen to the wildlife in this area, its their natural habitat. There is nowhere for them to go because half the land was previously used. 	Noted. Refer to Biodiversity Assessment (Appendix N).
Cassim Kader	Unfair process. It was started in 2010 with no consultation with public or	Noted.
Isipingo Resident	affected residents as is being done now, late in the process.	- Noted.
25 October 2016	My reason for buying in Nilgiri was peace, quiet, security and retirement.	Noted.
	This project will bring noise, pollution, drugs and alcohol.	Noted.
	This is our example of poor town planning. It's a way to try and rectify the	Noted.
	mistakes of useless politicians who made empty phrases to these affected people.	
	The EIA shows ecosystems that have been in existence for many years. It	Noted. Refer to Biodiversity Assessment
	will now be destroyed, there must be a reason why previous offices left this land vacant.	(Appendix N).

I&AP	COMMENT	RESPONSE
	I shall reach my retirement age in a few years' time and cannot afford to move houses.	Noted.
	It will be a huge inconvenience for me at huge expense.	Noted.
	Such development will cause degradation of a prime area.	Noted.
	This impacts the whole neighbourhood.	Noted.
	Why should the residents be forced into such inconvenience because of	Noted.
	the mistakes of a few incompetent politicians.	Noted.
	This is not democracy.	Noted.
Dhiren Gangadayal Isipingo Resident	 A year long EIA needs to be done to check on season plants, migratory birds, existing bird life. 	 Noted. Refer to Biodiversity Assessment (Appendix N).
25 October 2016	 Traffic congestion is already a problem at the intersection of Old Main Road and Saunders Avenue and Platt Drive/Old Main Road. 	 Noted. Refer to the Traffic Impact Assessment (Appendix L).
	The existing layout of Isipingi Hills cannot cater for additional high density housing.	Noted.
	Noise pollution, impact on surrounding schools and an already high crime rate.	Noted.
	 Lack of service delivery – there are no community halls, sports centres, outdoor gyms, cricket fields, old age homes. 	Noted.
	Lack of pavements in most roads and street lights that don't work for many months.	Noted.
Misiwe Ngubo	We fear for our safety – crime has escalated.	Noted.
Isipingo Resident	The development will decrease the value of our houses.	Noted.
25 October 2016	 We do not have recreational facilities. The vacant site can provide recreational facilities for our children. 	Noted.
Shobha Singh Isipingo Hindu Temple 25 October 2016	The development will cause disturbance as it borders on our temple site.	Noted.
Rajpaul Mothilall	The development will have negative impacts on the local residents.	Noted.
Isipingo Resident 25 October 2016	 There will be an increase in the crime rate, i.e. house/business break-ins. Property will be devalued. 	Noted.
Chanmathie Rajpaul Isipingo Resident 25 October 2016	Negative impacts on residents, i.e. crime and devaluation of property.	Noted.
Ugan Pillay	Trees will be cut and destroyed to build more houses.	Noted.
Isipingo Resident 25 October 2016	Crime will increase.	
Ambi Moodliar	Crime will increase in the area.	Noted.
Isipingo Resident	Trees will be destroyed to build more homes.	

I&AP	COMMENT	RESPONSE
25 October 2016		
Shunmugam Pillay Isipingo Resident 25 October 2016	Roads will be more busy.Crime will increase.	Noted.
Inbanaygie Pillay Isipingo Resident 25 October 2016	 The area and roads will become too congested. The crime rate will increase. 	Noted.
Raj Singh Isipingo Resident 25 October 2016	Devaluation of my property.	Noted.
Vittha Singh Isipingo Resident 25 October 2016	 Development will cause disturbance at night. The access will be very congested. Lower property values. 	Noted.
Divia Naidoo	Currently the rate of crime in Isipingo Hills is high.	Noted.
Isipingo Resident 25 October 2016	Inclusion of many unemployed persons would further increase the crime rate.	Noted.
	The value of the property would depreciate considerably.	Noted.
	The Main Road is the thoroughfare for residents of Isipingo Hills; Lotus Park; Orient Park and this currently presents many accidents and traffic congestion. Accommodating a further 750 families would add to this problem.	Noted.
	 Overcrowding of the current open spaces would definitely have an impact on the environment. 	Noted.
Rehana Sheik Ahmed Isipingo Resident 25 October 2016	I am not in favour of this development and strongly object to it continuing. As a resident I fear the consequences if it goes through.	Noted.
Mahomed Shaffee Sheik Ahmed Isipingo Resident 25 October 2016	I am not in favour of this development and strongly object to the proceeding of the development, citing reasons such as adding to the already crime ridden situation and dropping of property values.	Noted.
Shimaal Gopichund Isipingo Resident 25 October 2016	We as a community feel this will be a safety hazard to our homes.	Noted.
Mfundo Shezi Isipingo Resident 25 October 2016	Negative impact on the residents.	Noted.
Kapish Singh Isipingo Resident 25 October 2016	The development will have a negative impact on our area.	Noted.

I&AP	COMMENT	RESPONSE
Navarathnum Govender Isipingo Resident	Traffic congestion entering and exiting Isipingo Hills – more mini bus/combi taxis in the area.	Noted.
25 October 2016	Easy access into residential area, unemployed will cause crime rate to	Noted.
	increase.	
	Residential property value will depreciate further.	Noted.
	 Service delivery by the Municipality is at present at an all time low. This development will only exacerbate the situation. 	Noted.
	Overcrowding and poor living standards will pose serious health hazards and will further impact on the high crime rate in Isipingo.	Noted.
Kogilambal Pather	Crime rate will increase due to unemployment.	Noted.
Isipingo Resident	 Overcrowding and poor living conditions will pose serious health hazards. 	Noted.
25 October 2016	Residential value of property will depreciate.	Noted.
	Traffic congestion.	Noted.
Nalika Pather	Increase in crime.	Noted.
Isipingo Resident	Traffic congestion, especially at Platt Drive.	Noted.
25 October 2016	Property value will decrease.	Noted.
	Unemployment will lead to more crime and drug related issues.	Noted.
Gohaseelen Pather	Traffic congestion entering and exiting Isipingo Hills.	Noted.
Isipingo Resident	Existing high crime rate will increase.	Noted.
25 October 2016	Market value of properties will depreciate.	Noted.
	Service delivery by eThekwini Municipality is at present low. This	Noted.
	development will make the situation worse.	
Shereen Mahomed	Increase in human and motor traffic.	Noted.
Isipingo Resident	Impact on wildlife in the area.	Noted.
25 October 2016	Children need the site as a recreational area.	Noted.
	I am against the proposed establishment.	Noted.
Taskeen Mahomed	Increase in human and motor traffic.	Noted.
Isipingo Resident	Impact on wildlife in the area.	Noted.
25 October 2016	Children need the site as a recreational area.	Noted.
	I am against the proposed establishment.	Noted.
Latha Lechman	I object against the RDP houses being built as crime would increase in the	Noted.
Isipingo Resident 25 October 2016	area. The residents would not have stable jobs, which will result in them breaking into the home of others.	
Dees Lechman	I object against the RDP houses being built as it would increase crime and	Noted.
Isipingo Resident	result in additional pollution in our area.	
25 October 2016	We require additional trees for oxygen as by cutting down the trees it will become very claustrophobic.	Noted.

I&AP	COMMENT	RESPONSE
Sibusiso Mkhize Isipingo Resident 25 October 2016	I as a concerned resident do not mind people having shelter provided that it is similar to the houses next to it.	Noted.
Saloshnie Nadasen Isipingo Resident 25 October 2016	The development will destroy indigenous forest species such as mammals, birds. The species developed which is account will be taken out. This about the second such as the second	Noted.
25 October 2016	 The grassland which is present will be taken out. This should not be removed. The development will cause pollution problems as well. 	Noted.Noted.
Sizwe Ngubo		
Isipingo Resident	This development will surely drop the value of our houses.	Noted.
25 October 2016	We are also concerned about the safety of ourselves and our properties.	Noted.
25 October 2016	We do not have any recreational facilities here. Our kids need that a lot. The second s	Noted.
	There is also the issue of a school nearby. The pupils won't be safe.	Noted.
	 The crime rate will increase because ever since the existence of the transit camp crime has escalated. 	Noted.
Nsika Wesley Mvune	This project will have a negative impact on the Isipingo Hills residents.	Noted.
Isipingo Resident	The crime rate will go up rapidly.	Noted.
25 October 2016	 Primrose Primary School kids will not be able to study because of noise. 	Noted.
	This project will cause load shedding because of increase in electricity.	Noted.
	The value of properties will go down.	Noted.
Ahmad Sader Kathrada	There will be depreciation in the market value of properties in the area.	Noted.
Isipingo Resident	There are monkeys living on the proposed development area.	Noted.
25 October 2016	 There is traffic congestion mainly at the Platt Drive and Old Main Road robot. 	Noted.
	 We already have serious problems with stormwater drainage and a lack of recreational facilities. 	Noted.
	 The present infrastructure will not be able to support the proposed number of families to be moved to the area. 	Noted.
	 Crime is already rife in the area. Placing such a huge number of people in such a small area is going to worsen the situation. 	Noted.
	 There are many more reasons why the proposed area should not be considered for such a development. 	Noted.
Ebrahim Kathrada	A troop of monkeys are presently occupying the land proposed for	Noted.
Isipingo Resident	development.	
25 October 2016	The access roads into and out of Isipingo Hills are already so badly congested, especially in the mornings and late afternoons and evenings.	Noted.
	The space provided does not allow all my concerns to be listed here.	Noted.
	Property valuations in Isipingo Hills will drop drastically.	Noted.

I&AP	COMMENT	RESPONSE
M. Raiman Isipingo Resident 25 October 2016	The proposed development could degenerate into an area for criminals, drug dealers and gangsters impacting on all in the neighbourhood.	Noted.
M. Raiman Isipingo Resident 25 October 2016	 Lack of proper open spaces. The possibility of informal units being developed by householders to rent out for additional income. 	Noted.Noted.
	The development could disintegrate into a slum in a few years with the danger of criminal elements taking root there.	Noted.

4.5 PUBLIC INFORMATION SESSION

A Public Meeting for the proposed residential development was held on Saturday, 25 February 2017, between 14h30 and 16h30, at the Isipingo Hindi Sabha Sarojini Crescent Hall in Isipingo. The purpose of the Public Meeting was to provide background information to I&APs on the proposed housing project and give I&APs the opportunity to raise any concerns and issues which they feel should be addressed during the Environmental Basic Assessment Process. All registered I&APs were personally invited by fax, e-mail, phone or post on 10 February 2017. In addition to this, SMSs were sent to all registered I&APs who supplied their cell numbers.

This meeting took place in the form of a Public Information Session whereby all available information on the proposed development and environmental process to be followed was presented in a PowerPoint Presentation. The meeting attendees were given the opportunity after the presentation to ask questions and raise concerns regarding the proposed housing development with the Environmental Assessment Practitioners (EAPs) from Green Door Environmental.

The EAPs documented the issues and concerns raised by the I&APs regarding the proposed residential development during the meeting, and the meeting minutes were circulated to all registered I&APs from the 03 March 2017.

The following Project Team members were present:

- Dr Rebecca Bowd Green Door Environmental (Environmental Assessment Practitioner); and
- Dr Phillipa Harrison Green Door Environmental (Environmental Assessment Practitioner).

The Attendance Register, meeting invitation, proof of notification (email and bulk SMS), a copy of the presentation, the meeting minutes and photos taken at the Public Meeting are included in Appendix R.

A summary of the queries and comments and responses given at the Public Meeting are contained within Table 2 below.

 Table 2: Comments received during the Public Information Session.

I&AP	COMMENT	RESPONSE
Meeting Attendee	The issue of noise has been included in the list of concerns raised by I&APs. Concerns relating to waste management and odour should also be included.	Noted. Waste management and odour concerns have been added to the list of issues raised by I&APs.
Meeting Attendee	eThekwini Municipality has broken Municipal By laws by not maintaining the properties and allowing them to degenerate. As a result the properties are currently assessed as having no biodiversity value. The Municipality needs to clear the alien vegetation and address the lack of maintenance first before the properties are assessed for their biodiversity value.	Noted.
Meeting Attendee	The transit camp residents were relocated from a different Ward than the proposed development site falls under (Ward 90). They are not part of Ward 90. They should be relocated back to the Ward that they fall under.	Noted.
Meeting Attendee	We have been informed that the transit camp residents are being moved to Cornubia, and that most of the families that were occupying the camp have already been relocated. If they are being re-housed at Cornubia then who is this proposed development for and why is it still being undertaken?	We have been informed by the Applicant that the development is to re-house those in the Isipingo Transit Camp.
Meeting Attendee	The proposed development will have severe traffic impacts, as the present traffic situation in the area is already very problematic.	Noted. A specialist Traffic Impact Assessment has been undertaken for the proposed development (Appendix L). The findings show that the residents of the proposed housing development will largely rely on public transport and a large proportion of trips to and from the development will therefore be on foot. The study concluded that there is sufficient capacity available within the surrounding road network to accommodate the added traffic generated by the proposed development.
Meeting Attendee	The proposed development site was previously earmarked for an old age home, which had the backing of the community. Documents were sent to the South Durban Local Council in this regard. Why has the use of the site for the housing project taken precedence over the development of the old age home?	We were not aware of any past plans for the property.
Meeting Attendee	Were notices about the proposed development placed in the local gazette?	Adverts were placed in the regional newspapers, the Mercury and Isolezwe as these newspapers cover a larger geographic area, and audience. I.e. a paper is read far more widely than a Gazette.

Meeting Attendee	Please provide details on the proposed accesses to the development and other road infrastructure as the development will result in an increase in the number of vehicles on the local road network. The development will have significant implications in terms of public transport and will result in congestion (public transport vehicles and pedestrians) around the site.	semi-detached, double-story, two bedroom housing units. The proposed development will also include internal roads comprising cul-de-sac and access ways. The cul-de-sac roads will have 8/10.5m road reserves with 4.5/7m wide roads. The access ways will have 10.5m road reserves with 4.5m wide roads. All roads will be surfaced, with concrete kerbing on one side to act as a drainage channel and to allow for stormwater from the housing units to discharge onto the roads. Access to the development is proposed to be off Kanku Road via an entrance roundabout. The existing Kanku Road and Yellowwood Grove intersection will be formalised into a new multi-leg traffic circle as part of the proposed development. There are no external roads or intersection upgrades required as a result of this proposed development. Approximately 100 parking bays will be provided for the proposed housing development, as based on the land-use and demographics of the associated target market, a parking rate of 1 bay per 5 units is deemed acceptable.
Meeting Attendee	 The proposed development site and surrounding areas have stability and drainage issues and are prone to subsidence. Many of the houses and buildings around the site are historic and old. The use of heavy construction machinery on the site can result in damage to these old houses and walls. 	 Noted. A site specific Geotechnical Assessment has been undertaken to assess the suitability of the site for the development (Appendix Q). The study provides recommendations and guidelines for the stable development of the site. A suitably trained engineer must assess the stability of existing old buildings in close proximity to the site, and confirm whether the use of heavy equipment during construction will likely lead to deterioration of the old buildings. If a risk is identified, alternative equipment must be used.
Meeting Attendee	Has the water authority assessed the development plans in terms of flood risks and subsidence issues?	The eThekwini Municipality Water and Sanitation Unit has provided preliminary comment on the project. As per the comments received, an upgrade of the existing sewer reticulation network is required to cater for the additional effluent generated by the proposed residential development. The Department of Water and Sanitation (DWS) will be provided with the Draft Basic Assessment Report for review and comment. The DWS will also assess the proposed development under the scope of the

	Water Use License Application. The proposed development site is located outside of the 1:100 year floodline of the nearest river.
Meeting Attendee	 Impacts on biodiversity, as development should protect and enhance open space, not destroy it. If the development goes ahead there will be no open space left in the area. Noted. This has been assessed in the Biodiversity Assessment (Appendix N).
Meeting Attendee	 The proposed development will have 350 or more houses on a 4ha site, which may house up to 1 500 people. This will have a significant impact on population density of the area. It also raises concerns about the living conditions of the residents of the housing development as the development will cram too many people into an inadequately sized space. Will the Municipality build more amenities to support the development such as a shopping center, clinic, school, sports facilities? Noted, however, the existing Isipingo Transit Camp residents are the target beneficiaries of the proposed Kanku Road residential development. The transit camp is located approximately 550m from the proposed development site. As such, the transit camp residents are already utilising the schools and other facilities should the project receive approval and the transit camp residents are relocated to the proposed development site.
Meeting Attendee	 Will the proposed development include areas of open space such as gardens for the residents as well as parking? How will they provide for this as the proposed layout does not make provisions for adequate parking space or gardens? The proposed layout plan includes a central recreational area and approximately 100 on-street parking bays, as based on the land-use and demographics of the associated target market, a parking rate of 1 bay per 5 units is deemed acceptable.
Meeting Attendee	 Will the proposed development conform to the planning guidelines and bylaws for the area or will it be subject to special planning regulations and conditions? The final layout and design of the proposed development will conform to Municipal Guidelines for development.
Meeting Attendee	 The proposed development entails constructing a high density development in the middle of a low density area. The development will be out of character in this area as the surrounding properties comprise low density houses. The specialist Socio-Economic Survey study has provided recommendations to limit this impacts, such as the use of architecture and finishes that take into account the nature and character of the existing area.
Meeting Attendee	Who will address the provision of amenities to support the proposed development? The eThekwini Municipality must address this.
Meeting Attendee	 The development will negatively affect existing amenities in the area such as roads, parking, green space. Once the public open space on the proposed development site is taken away there will be nothing left in the area. The development proposal does not take into consideration the community's right to public open space. Noted. Recommendations and mitigation measures have been included in this Basic Assessment Report and the EMPr (appendix M) to limit such negative impacts.
Meeting Attendee	 Have the preliminary studies identified any trees of conservation significant on the site? A specialist Biodiversity Assessment of the proposed development site has been undertaken (Appendix N). No flora or fauna of conservation significance was found to be present on the site.
Meeting Attendee	• Will Green Door Environmental be holding a second public meeting to • No, the environmental process includes one public

	provide responses to all the issues raised?	meeting. All the issues raised at this meeting and
		throughout the process, together with responses have been included in the Draft Basic Assessment Report which is available to all I&APs for review and comment.
Meeting Attendee	 What impacts will the tree roots that remain in the ground after the site has been cleared of vegetation have on the development? How will this impact be managed? 	Tree roots will be removed when the site is cleared.
Meeting Attendee	 If the site is cleared of vegetation and roots using a TLB and other heavy machinery there will be damage to buildings and walls on the properties surrounding the development site. Who will be liable to pay for this damage? 	 A suitably trained engineer must assess the stability of existing old buildings in close proximity to the site, and confirm whether the use of heavy equipment during construction will likely lead to deterioration of the old buildings. If a risk is identified, alternative equipment must be used.
Meeting Attendee	Will the development include parking or will the residents be forced to park on the street causing congestion and traffic problems?	 The proposed layout plan includes approximately 100 on- street parking bays for the residents of the housing development, as based on the land-use and demographics of the associated target market, a parking rate of 1 bay per 5 units is deemed acceptable.
Meeting Attendee	How will our comments and queries be responded to?	All comments and responses have been included in this Draft Basic Assessment Report which is available to all I&APs for review and comment.
Meeting Attendee	• The socio-economic impacts that will result from the development must be assessed and adequately addressed. There are many existing social problems at the transit camp. The residents embark on regular demonstrations resulting in damage and destruction of property. Theft and crime are serious problems at the camp, cable theft is ongoing, alcohol abuse, drug abuse, prostitution are all problems at the transit camp. The transit camp residents will bring these social problems with them when they move into the area. This is unfair on the existing community and will result in a number of significant socio-economic impacts on the existing Isipingo community. An alternative location for the development should be found.	Noted. A Socio-Economic Survey study has been undertaken (refer to Appendix K). Refer to Section 3 of this report for information on property alternatives.
Meeting Attendee	Has the potential increase in crime resulting for the development being considered? The crime in the area will increase significantly. There is only one police station in the area which does not have the capacity to deal with the existing crime levels. The development will have significant safety and security impacts on the surrounding community.	This has been assessed in the Socio-Economic Survey study (Appendix K) and recommendations have been provided to limit crime-related impacts.
Meeting Attendee	The development will result in the devaluation of properties in the area.	 Noted. It has been recommended that the development architecture and finishes should take into account that of

	the existing area. The Munic inspect the area and more specif ensure no illegal land use activit potentially have a negative impatheir property values. In administration Municipality Environmental Heprovided comment stating that the must be conducted in such a mundue risk or negative impacts the surrounding residential coproblems arise, this department further mitigation measures.	ically the development to ies take place that could act on the community or ddition, the eThekwini alth Services Unit has e proposed development nanner as not to impose on the quality of lives of mmunities. Should any has the right to call for
Meeting Attendee	 According to the layout plan the housing units will be 40m² in size. This is too small to house families. The layout plan has been revise 50m² floor size. The number of limited to the actual unit des members should be encourage should overcrowding take Municipality to act accordingly. 	people per unit must be igned size. Community to notify the Municipality
Meeting Attendee	 All the Municipality is doing is moving the transit camp from the current site because the area is prone to flooding and placing them on higher ground. All the existing social problems at the camp will come with them when they move. The surrounding community will now be affected. Noted. The proposed residential housing with Municipal service improvement compared to the transit camp. Many of the prolinked to lack of basic services are 	es. This will be a vast living conditions at the blems at the camp are
Meeting Attendee	 The Isipingo Hills residents will still have to pay high rates even though the development will result in the devaluation of properties, in order to cover the costs of the development. The Municipality needs to provide feedback to the community on the issues of rates and devaluation of properties. 	ated to the Applicant.
Meeting Attendee	 The current transit camp residents were promised electricity which never materialized and resulted in protests. What will happen when the Municipality cannot provide electricity at the new development? They will protest here as well. The proposed residential development the existing Municipal services electricity and stormwater infrast to cater for the new development. 	s in the area. Sewer, ructure will be upgraded
Meeting Attendee	 As per the EIA Legislation have alternative locations for the proposed development been investigated? Refer to Section 3 of this Basic information on alternatives. 	Assessment Report for
Meeting Attendee		to limit negative impacts nembers and property ndations of the Socioment architecture and

		The Municipality should regularly inspect the area and more specifically the development to ensure no illegal land use activities take place that could potentially have a negative impact on the community or their property values. In addition, the eThekwini Municipality Environmental Health Services Unit has provided comment stating that the proposed development must be conducted in such a manner as not to impose undue risk or negative impacts on the quality of lives of the surrounding residential communities. Should any problems arise, this department has the right to call for further mitigation measures.
Meeting Attendee	• The Isipingo Hills residents pay high rates. The transit camp residents will not be able to pay the rates for the area. The Municipality should engage directly with the Isipingo Hills community regarding the development as they are using our rates for the development. The ratepayers are also not just from within the immediate Isipingo Hills area but further afield.	• Noted.
Meeting Attendee	• The community wants the proposed development site to remain as public open space or alternatively to be used for a development that benefits the community such as the previously proposed old age home. It is unfair that the Municipality is imposing this development on a community who does not want it, and which will result in such a negative socio-economic impact on the existing community, when the development can be undertaken elsewhere.	• Noted.
Meeting Attendee	Was an Environmental Assessment process undertaken for the construction of the transit camp?	 Green Door Environmental has not been involved in any previous work relating to the transit camp. We are unable to provide any information on any previous environmental processes undertaken at the transit camp site.
Meeting Attendee	What guarantee is there that the community will get a response from the Municipality about the issues raised?	 The environmental Basic Assessment Process will ensure that the issues raised by I&APs will be sent to the Municipality for comment. Green Door Environmental will endeavour to get the relevant responses from the Municipality so that the issues are adequately addressed.
Meeting Attendee	How was Green Door Environmental awarded the contract for the environmental work for the project?	 Green Door submitted a tender for the environmental work and were awarded the environmental contract based on the tender. Green Door Environmental is completely independent.
Meeting Attendee	Was the proposed development taken into consideration in the latest property valuation roll for the area?	• Green Door is not involved in the planning process for the development. We are unable to provide a response at

		this stage.
Meeting Attendee	Was the Ward Councilor invited to the Public Meeting?	Yes the Councillor for Ward 90 was notified of the Public Meeting.
Meeting Attendee	 Were all of the I&APs who submitted comment forms (415 forms) to Green Door Environmental as part of the petition from the Isipingo Hills Residents Group registered as I&APs for the project and notified of the Public Meeting? 	the I&AP database for the project. Those I&APs who
Thabo Molete	 People who live in this area must be listened to. Our government must not impose as the previous government. We were oppressed by whites but now we are oppressed by black government. 	
Dr. Neil Wilson	 Alternative locations must be examined for the establishment of the residential development for put forward to the community. 	Noted. Refer to Section 3 of this report.
	 The specialist studies and the BAR must be made available to the community for comment. This applies especially to the Biodiversity Impact Report. 	
	 The neglect of the public open space has to be addressed as this long term neglect over decades has resulted in the greatest impact on the areas biodiversity, especially its critically endangered coastal forest which has been invaded by Category 1 invaders. 	
	 Hence this illegal activity cannot be used as any argument for the developments in terms of the biodiversity. 	Noted.
	 During the public meeting CARA was mentioned as being the legislation pertaining to alien plant invaders. This is incorrect. The Act presiding over invaders is NEMBA. 	

4.6 SUMMARY OF ISSUES RAISED

The main issues raised to date during the public participation process for the project are:

- Loss of Public Open Space;
- Need for alternative sites to be investigated;
- Damage to and loss of access to Isipingo Cemetery and historic Dick King Graveyard;
- Loss of biodiversity / biodiversity impacts as the site falls within a Critical Biodiversity Area;
- Socio-economic impacts associated with transit came being brought to area, such as increased, drug use, prostitution;
- Safety and security risks to surrounding residents;
- Devaluation of properties as high density development is out of character with existing low density units;
- Unfairness as have to pay high rates to fund development which will result in devaluation of property;
- Damage to nearby old buildings through the use of heavy machinery on site;
- Noise, waste management and odour impacts;
- Transit camp residents being transferred from another Ward;
- Increase in traffic and congestion, most notably from inadequate parking and increased public transportation;
- Increase in pedestrian traffic;
- Development on the site could be at risk from flooding and subsidence;
- Need for additional local amenities such as shops, schools, clinic and sports facilities as a result increased population;
- Risk of protests if there is not sufficient electricity;
- Municipality forcing a development which the community does not want;
- The fact that the Municipality has not cleared the site of Category 1 alien vegetation must not be used as an argument to develop at this location;
- Inadequate service infrastructure and facilities in the area; and
- Suitability of the development type (high density municipal housing in a medium density, high rate paying area).

4.7 CIRCULATION OF THE DRAFT BASIC ASSESSMENT REPORT (DBAR)

I&APs have been notified of the availability of the DBAR via email, post, fax and SMS. I&APs have been given 35 days to comment on the Draft BAR. Hard copies of the Draft BAR have been circulated to the following I&APs for review and comment:

- Dominic Wieners Ezemvelo KZN Wildlife
- Bernadet Pawandiwa Amafa Heritage KZN
- Zama Hadebe Department of Water and Sanitation
- Nandipha Sontangane Department of Agriculture, Forestry and Fisheries
- Petrus Mans Department of Agriculture, and Rural Development
- Shoni Makhwedza eThekwini Municipality
- Yugeshni Govender Department of Economic Development, Tourism and Environmental Affairs
- Isipingo Hills Housing Concern Group
- Isipingo Hills Residents Group
- South Durban Community Environmental Alliance

A total of ten hard copies of the report have been provided to the Isipingo Hills Housing Concern Group in Isipingo which are available to the public for review. I&APs have also been informed that electronic copies of the report are available on request.

5. POTENTIAL IMPACTS ON THE SOCIAL AND ECONOMIC ENVIRONMENTS

5.1 LOCAL ECONOMY AND EMPLOYMENT OPPORTUNITIES

Description:

The proposed Kanku Road residential development will contribute towards job creation during the construction phase of the project and optimise land use to address the housing shortage in the eThekwini Municipal area.

Implication / Risk / Impact:

The proposed residential development will result in the generation of job opportunities during the construction phase and associated skills development. This in turn, will result in income generation, the associated upliftment of community members, as well as local economic development within the area. It is estimated that 100 skilled and semi-skilled jobs will be creased during the construction phase, and 4 semi-skilled jobs will be creased during the operational phase (e.g. care takers).

Mitigation / Recommendations:

Local businesses and unemployed people in the immediate area must be considered first, before employing labour and services from further afield.

5.2 NEED AND DESIRABILITY

Description:

The Kanku Road residential development will have social, environmental and economic benefits. The proposed residential development will help address the housing backlog that currently exists in the eThekwini Municipality. The proposed development will provide formalised housing and services to residents of the informal Isipingo Transit Camp, which will result in social upliftment and help alleviate some of the social problems often associated with informal settlements such as crime, prostitution, substance abuse and unemployment.

The relocation of the transit camp residents and closing of the transit camp will alleviate the serious negative environmental impacts that are currently occurring at the transit camp site associated with the influx of solid waste, raw sewage, sediment and stormwater runoff into the surrounding environment.

The proposed Kanku Road residential development will also result in negative environmental impacts due to the loss of Public Open Space on Portion 4 of Erf 2363. In addition the project may result in negative socio-economic impacts on the surrounding Isipingo Hills community associated with increased crime, noise and aesthetic impacts and devaluation of properties in the area.

Implication / Risk / Impact:

- The proposed residential development will result in job creation, skills development and income generation. It will also help to address the housing backlog in the area, by providing housing for families currently residing in the Isipingo Transit Camp.
- The proposed development will result in the loss of Public Open Space.
- The proposed development may result in negative socio-economic impacts including increased crime, devaluation of properties, unruly behaviour, overcrowding, noise and aesthetic impacts.

Mitigation / Recommendations:

• Local businesses and unemployed people in the immediate area must be considered first, before employing labour and services from further afield.

- The use of local contractors, suppliers and service providers must be undertaken.
- The Municipality and community must work with the SAPS and Metro Police to devise a safety and security strategy for the area. The community should be encouraged to establish an active Community Policing Forum.
- The development architecture and finishes should take into account that of the existing area. The Municipality should regularly inspect the area and more specifically the development to ensure no illegal land use activities take place that could potentially have a negative impact on the community or their property values.
- The proposed development must be conducted in such a manner as not to impose undue risk or negative impacts on the quality of lives of the surrounding residential communities. Should any problems arise, this should be reported to the eThekwini Environmental Health Department.
- The number of people per unit must be limited to the actual unit designed size. Community members should be encourage to notify the Municipality should overcrowding take place to enable the Municipality to act accordingly.
- Municipal bylaws in terms of noise and unruly behaviour should be implemented. The community should also report such instances to the police for action.

5.3 PLANNING INITIATIVES

National Spatial Development Perspective (NSDP)

The Policy Co-ordination and Advisory Services introduced a National Spatial Development Perspective (NSDP), which was then endorsed by the Cabinet in March 2003. The NSDP works in conjunction with different Departmental and Provincial spatial and development strategies. The four principles of the NSDP are as follows:

- Economic growth is a prerequisite for achievement of policy objectives;
- Government spending should concentrate on fixed investment, focusing on localities of economic growth and/or economic potential;
- Efforts to address the past and current inequalities should focus on people not on places; and
- To overcome spatial distortions of apartheid, future settlement and economic development opportunities should be channelled into nodes adjacent to the main growth centres.

In order to distinguish between localities, the NSDP uses two concepts as methodological tools, which are Potential and Poverty Gap. These two concepts will assist the NSDP in providing a coarse-grained analysis from a national perspective, which will be supplemented by a more finely, grained analysis at Provincial and Local Government level.

In defining potential, the NSDP has drawn on recent tradition of "institutional economics" a field that has come to dominate both developmental economics and regional planning. The institutional approach suggests that beyond the usual sources of comparative advantage, the institutional adequacy of a locality will help determine whether development is sustainable or not. The NSDP therefore uses concepts of potential that rely strongly on the presence of institutional capacity to realize the developmental impact of other resources.

In summary, the NSDP will have a role to play as an instrument that informs the respective development plans of the three spheres of government i.e. IDP, PGDS and the Medium Term strategic Framework (MTSF).

Accelerated Services on Growth Initiative South Africa (ASGISA)

The mandate was for government to halve poverty by 2017. To do this the country needs a growth rate of 5% on average. Because of backlogs in infrastructure, investment, inadequate planning, and in some cases, market structures that do not encourage competition, the price of moving goods and conveying services over distance is higher than it should be. In South Africa, which is a large country, with considerable concentration of production inland, and which is some distance from all major industrial

markets, deficiencies in logistics are keenly felt. This is the main reason why beneficiation processes need to be encouraged in the development of the local economy and in close proximity to the areas where products are produced.

Those parts of the legacy of apartheid most difficult to unwind are the deliberately inferior system of education and the irrational patterns of population settlement. In a period of growth, it is evident that we lack sufficient skilled professionals, managers and artisans, and that the uneven quality of education remains a contributory factor. In addition the price of labour of the poor is pushed up by the fact that many live a great distance from their places of work.

Certain weaknesses in the way government is organised, in the capacity of key institutions, including some of those providing economic services, and insufficiently decisive leadership in policy development and implementation all negatively impact on the country's growth potential. Countering these constraints entails a series of decisive interventions. These interventions amount not to a shift in economic policy so much as a set of initiatives designed to achieve our objectives more effectively.

In developing responses to the binding constraints, certain measures to counter the constraints were developed:

- Macroeconomic issues;
- Infrastructure programmes;
- Sector investment strategies (or industrial strategies);
- · Skills and education initiatives.
- Second economy interventions; and
- · Public administration issues.

KZN Growth and Development Strategy (PGDS)

Inequalities exist in our economy and there is a legacy of inequitable spatial development. This has had a negative impact on public sector investment as highlighted by the National Spatial Development Perspective (NSDP). This is evident in the lopsided economic and social costs for poor communities in locations far from employment and other opportunities. The PGDS is a vehicle to address the legacies of the apartheid space economy, to promote sustainable development and to ensure poverty eradication and employment creation.

Government has a mandate to restructure the process of development and service delivery in the province. This is to be achieved through the three spheres of government, the different government sectors and the various strategic frameworks. The key challenges it faces is to effectively align and harmonise these structures towards this end; and to harness and align fiscal, financial and human resources at its disposal towards eradicating poverty, creating employment and laying the foundations for accelerated economic growth.

The PGDS offers a tool through which provincial government can direct and articulate its strategy and similarly for local government to reflect the necessary human, financial and fiscal support it needs to achieve these outcomes. It facilitates proper coordination between different spheres of government and aims to prevent provincial departments from acting out of concert with local Municipalities. It enables intergovernmental alignment and guides activities of various role players and agencies (provincial sector departments, parastatals, district and local Municipalities). The PGDS will enhance service delivery.

It is a framework for public and private sector investment, indicating areas of opportunities and development priorities. It addresses key issues of implementation blockages whilst providing strategic direction. The PGDS implies a developmental approach to government. This implies a pro-active and facilitative approach to development and not one based of formulating and applying regulations and restrictions. The PGDS on the one hand involves preparing policies, strategies and guidelines and on the

other hand it involves preparing mechanisms to align and facilitate the implementation, monitoring and evaluation of key growth and development priorities.

Millennium Development Goals

Looking ahead to 2017 and beyond, the Municipality believes they can achieve the overarching goal: to put an end to poverty.

The MDGs represent a global partnership that has grown from the commitments and targets established at the world summits of the 1990s. Responding to the world's main development challenges and to the calls of civil society, the MDGs promote poverty reduction, education, maternal health, gender equality, and aim at combating child mortality, AIDS and other diseases.

Set for the year 2017, the MDGs are an agreed set of goals that can be achieved if all actors work together and do their part. Poor countries have pledged to govern better, and invest in their people through health care and education. Rich countries have pledged to support them, through aid, debt relief, and fairer trade.

Alignment with Municipal Goals and Objectives

The eThekwini Municipality IDP and SDF identify the need to eliminate the housing and infrastructure backlog through the provision of adequate housing infrastructure, as well as the lowering the unemployment rate. The proposed project is directly in line with the Municipal goals and objectives through the need to address the housing and infrastructure backlog through infill development on vacant or underutilized land and the provision of employment opportunities.

Implication / Risk / Impact:

None.

Mitigation / Recommendations:

None

5.4 CULTURAL, HISTORICAL AND ARCHAEOLOGICAL RESOURCES

Description

A Heritage Survey undertaken by Active Heritage cc (refer to Appendix O), of the proposed development site on Portions 4 and 7 of Erf 2363 Isipingo, identified no heritage sites or features on the proposed development footprint. However, the Dick King Graveyard, which is a Grade II Provincial heritage site is situated approximately 90m to the east of the development site. The old Isipingo Cemetery also borders the north eastern boundary of the site and is rated as locally significant.

Implication / Risk / Impact:

- All human remains have high heritage significance at all levels due to their social value and may not be altered without permission of the families concerned and a permit from Amafa.
- There is a small possibility that some graves may be hidden in the dense vegetation on the north eastern section of the proposed development site. These would be a spill over from the old Isipingo Cemetery. However, none were observed during the field survey.

- Although none of the identified graves occur on the development footprint, it is still essential that a 30m no-development buffer be maintained around the graveyards during all phases of the project.
- A sturdy fence must also be erected between the old Isipingo Cemetery and the north eastern section of the development site prior to the commencement of any construction activities.
- In the unlikely event that the development expose any graves on the development footprint it is imperative that all construction cease immediately and the local heritage agency Amafa or a heritage consultant be contacted for further evaluation.

Attention is drawn to the National Heritage Resources Act, 1999 (Act No. 25 of 1999) which, requires
that operations that expose archaeological or historical remains should cease immediately, pending
evaluation by the provincial heritage resources authority.

5.5 SURROUNDING LANDUSE AND AESTHETICS

Description:

The proposed Kanku Road residential development site is approximately 4ha in extent and is located within the Isipingo Hills area. The development site is surrounded by medium to low density residential housing, the Primrose Primary School and the old Isipingo Cemetery and historic Dick King Graveyard. It is also located in close proximity to the Isipingo Rail light industrial and commercial complex. Surrounding land uses therefore comprise residential, industrial and retail.

Implication / Risk / Impact:

- The proposed development will alter the land where the infrastructure is established.
- The proposed development will require the closure of Public Open Space and application for rezoning.
- The proposed development may have a negative impact on the surrounding Isipingo Hills residents associated with increased noise, overcrowding, congestion and aesthetic impacts.
- The proposed development may impact negatively on the Isipingo Cemetery if the cemetery is not adequately cordoned off.
- The proposed development may result in the devaluation of properties in the area as the project entails the construction of high density, Municipal housing in a medium density residential area.

Mitigation / Recommendations:

- Architectural controls must ensure that the new infrastructure will blend in with the existing residential developments in the area;
- It is essential that a 30m no-development buffer be maintained around the cemetery during all phases of the project.
- A sturdy fence must be erected between the old Isipingo Cemetery and the north eastern section of the development site prior to the commencement of any construction activities.
- Noise impacts must be controlled.
- The Municipality and community must work with the SAPS and Metro Police to devise a safety and security strategy for the area. The community should be encouraged to establish an active Community Policing Forum.
- The development architecture and finishes should take into account that of the existing area. The
 Municipality should regularly inspect the area and more specifically the development to ensure no illegal
 land use activities take place that could potentially have a negative impact on the community or their
 property values.
- The proposed development must be conducted in such a manner as not to impose undue risk or negative impacts on the quality of lives of the surrounding residential communities. Should any problems arise, this should be reported to the eThekwini Environmental Health Department.
- The number of people per unit must be limited to the actual unit designed size. Community members should be encourage to notify the Municipality should overcrowding take place to enable the Municipality to act accordingly.
- Municipal bylaws in terms of noise and unruly behaviour should be implemented. The community should also report such instances to the police for action.

5.6 TRAFFIC, ROADS AND ACCESS

Description:

The area surrounding the proposed development site is characterised by low to medium density residential, retail and industrial land-uses. The development site is well served on a wider and local scale by a number of major roads, including Phila Ndwandwe Road, Jeffels Road and the N2 National Freeway to the east,

Wanda Cele Road and Platt Drive to the South, and Saunders Avenue to the north. Access to the development is proposed to be off Kanku Road via an entrance roundabout. The existing Kanku Road and Yellowwood Grove intersection will be formalised into a new multi-leg traffic circle as part of the proposed development. There are no external roads or intersection upgrades required as a result of this proposed development.

The proposed development will also include internal roads comprising cul-de-sac and access ways. The cul-de-sac roads will have 8/10.5m road reserves with 4.5/7m wide roads. The access ways will have 10.5m road reserves with 4.5m wide roads. All roads will be surfaced, with concrete kerbing on one side to act as a drainage channel and to allow for stormwater from the housing units to discharge onto the roads. Approximately 100 parking bays will be provided for the proposed housing development, as based on the land-use and demographics of the associated target market, a parking rate of 1 bay per 5 units is deemed acceptable.

The site is located less than 1 km from major public transport depots. It is anticipated that the proposed development will be heavily reliant on public transport, and a large proportion of trips to and from the development will be on foot.

Based on the results of the specialist Traffic Impact Assessment study (Appendix L) undertaken by BIS Consulting Traffic and Transportation Engineering (November 2017), there is sufficient capacity within the surrounding road network to accommodate the traffic generated by the proposed development.

Implication / Risk / Impact:

• The proposed residential development will result in the increase in pedestrian traffic.

Mitigation / Recommendations:

- Access to the development must be provided off Kanku Road.
- There are no external roads and / or intersection upgrades required as a result of the proposed development.
- It is recommended that warning signage be erected to warn motorists of slow-moving vehicles during the construction phase.

5.7 NOISE AND DUST NUISANCES

Description:

Construction activities onsite will require the use of heavy machinery for earthworks. The construction phase will generate noise from the use of construction machinery and increased traffic (construction vehicles) and dust. There will also be a number of people in the area due to the presence of construction labourers on the site, as well as other potential job seekers. This impact however is only temporary, ending with the completion of the construction phase.

During the operational phase, vehicle movement to and from the residential site and the presence of the residents on the site will result in additional noise.

Implication / Risk / Impact:

- Noise nuisance may negatively impact surrounding local residents within the area if mitigation measures are not adequately implemented.
- It is likely that there will be dust and noise impacts within the area during the construction phase.

Mitigation / Recommendations:

• It is recommended that construction activities be limited to working hours between 7am and 5pm during weekdays. Furthermore, construction on weekends and public holidays should not be permitted.

- Machinery and equipment must be maintained and regularly serviced to ensure that unnecessary noise is prevented. Workers on site must not create unnecessary noise such as hooting or shouting.
- Dust from the construction site must be managed in an efficient and environmentally sensitive manner;
- Dust suppression measures, such as the spraying of water on bare soil, and the use of shade cloth, must be undertaken during dry and windy conditions.
- · Speed limits must be adhered to at all times.
- Due to the magnitude of the housing development and its close proximity to surrounding neighbours, residential controls must be put in place during the operation phase to prohibit residents from making loud noise at night, such as loud music from parties, etc.

5.8 SECURITY

Description:

The construction phase will result in an increase in the number of people in the area due to the presence of construction labourers on the site, as well as other potential job seekers.

The operational phase of the project will result in a large influx of residents onto the site.

Implication / Risk / Impact:

Security will be required during the construction phase to manage staff and construction vehicles and materials. Potential exists for labourers to trespass onto adjoining properties. Crime in the area could increase as a result of criminals posing as people seeking employment on the site. Crime in the area may also potentially increase during the operational phase, as a result of the increase in people being relocated from the transit camp to the residential development.

- Construction labourers should be sourced from surrounding communities.
- All labourers must remain within the boundaries of the construction footprint at all times.
- Access onto and off the site must be controlled by a register system, this includes visitors.
- Construction staff should wear badges / tags / bibs to show that they are employed on the site;
- All restricted areas of the construction site must be designated with appropriate warning signs.
- If security issues arise, it is recommended that guards be present to look after any machinery or construction equipment that remains on site after work hours.
- During the operational phase representatives from the Kanku Road housing development should be encouraged to join local neighbourhood watch groups.
- The Kanku Road housing development must be incorporated into the existing community policing groups/forums operating in the Isipingo Hills area.
- The community must work with the SAPS and Metro Police to devise a safety and security strategy for the area.

6. POTENTIAL IMPACTS ON THE BIOPHYSICAL ENVIRONMENT

6.1 TOPOGRAPHY

Description:

Indicate the general gradient of the site:

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

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

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

Ground Cover:

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

The site is situated on the side slope of a general north east – south west trending gentle topographic ridge. The natural ground on the upper northern portion of the ridge slopes gently at 1:16.5 (3.5°) south east. The central portion of the site is generally flat with the eastern portion slopes in an easterly direction at an angle of less than 1:14 (4°). A broad valley head region is evident in the south western portion of the site and falls to the south west at 1:16.5 (3.5°). The side slope conformation is planar to slightly convex while the south western sector is distinctly more concave. Surface drainage is generally towards the east and south east over much of the site whilst a portion of the site drains to the south western sector.

Implication / Risk / Impact:

Vegetation clearance on the site, stockpiling of soil and uncontrolled construction activities have the potential to result in soil erosion. Construction will result in catchment hardening (i.e. roofs and roads). Uncontrolled stormwater flows off the hardened surfaces may result in erosion and sedimentation impacts.

- All nearby undisturbed slopes must be protected from erosion by demarcated the construction site. No vehicular or pedestrian access should be allowed beyond the demarcated area.
- A site specific stormwater management system that meets Municipal requirements for stormwater attenuation and management must be implemented for the proposed development for both the construction and operational phases.
- Earthworks and drainage systems must be designed in such a way that they prevent ponding.
- Steep slopes must be stabilised by soil stabilisation mechanisms, such as cladding, netting or hard structures, preferably with a natural look and that allow plant growth.
- Erosion control measures must be implemented on destabilised slopes.
- Service trenches must be backfilled as soon as possible.
- Re-vegetation of exposed soil should take place as soon as possible.

6.2 CLIMATE

Description:

The average maximum summer (November-February) temperature is 28 ℃ and the average minimum temperature is 21 ℃. The average maximum winter temperature is 23 ℃ and the average lowest temperature is 11 ℃. Precipitation occurs mostly in the summer months and the mean annual rainfall is approximately 1003mm. The rainfall over the summer months ranges between 120mm and 135mm. The mid-winter monthly rainfall ranges between 25mm to 30mm. Mean Annual Precipitation and Temperature in study area are illustrated in Figures 7 and 8.

Implication / Risk / Impact:

- Topsoil which is stockpiled during the construction phase has the potential to be windblown, causing dust.
- Potential exists for high intensity rainstorm events to cause severe erosion at the construction site.

- Appropriate measures (as outlined in the EMPr) must be taken to minimise the area of soil disturbance and the potential for the mobilisation of these bare areas.
- Earth dikes and diversions should be used to direct all storm flows away from the bare soil to reduce the risks of sedimentation.
- Sediment management during the construction phase of the development will be important. Sediment control devices such as sediment fences should be used.
- Soil stabilisation practices such as sediment blankets and mulching, should also be introduced onsite.
- Measures should be taken to cover exposed areas during high intensity rainfall events.
- Stockpiled topsoil should be dampened or covered during times of high wind to prevent dust.
- Rehabilitation and landscaping should take place in the wetter summer months to increase the newly planted vegetations' chance of becoming established.
- Construction should preferably be done during the winter months.

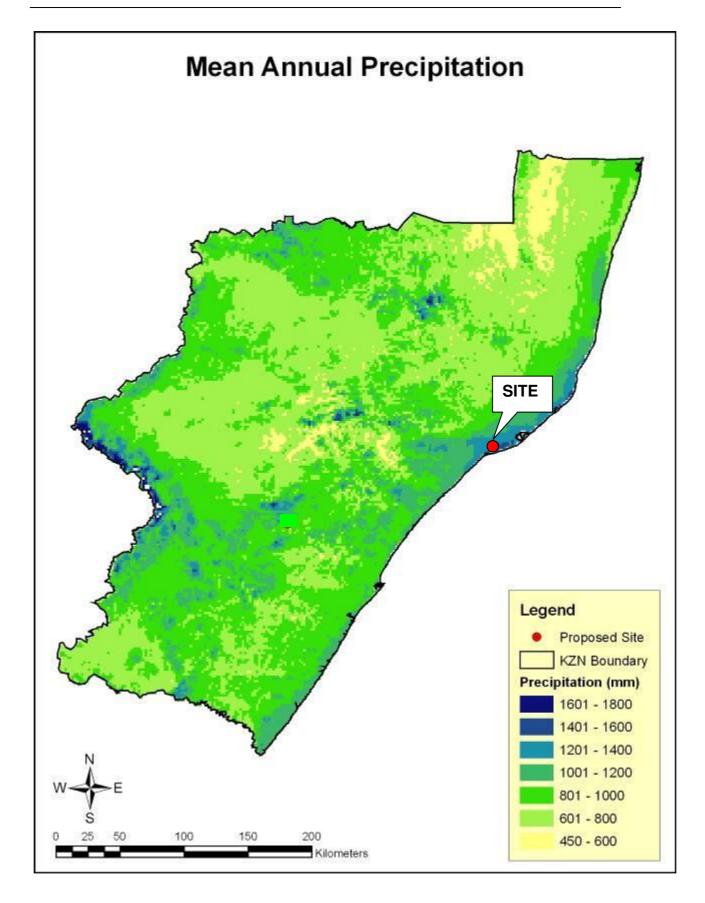


Figure 7: Mean Annual Precipitation for KwaZulu-Natal

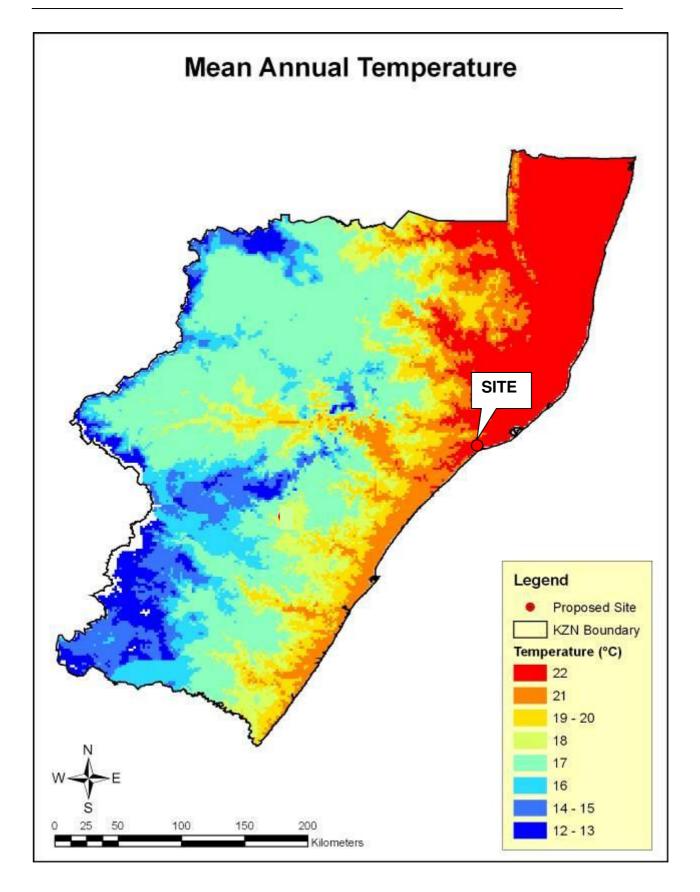


Figure 8: Mean Annual Temperature for KwaZulu-Natal

6.3 GEOLOGY AND SOILS

Description:

A Geotechnical Assessment was performed by Drennan Maud (Pty) Ltd (refer to Appendix Q). The site is underlain by aeolian (wind blown) derived sands and clayey sands of the Berea Formation extending to depths in excess of 3.0 metres below the existing ground level. Weathered Dwyka tillite is expected beneath the unconsolidated dune sediments in this area but the depth to the bedrock is not known. Generally though, a basal boulder bed is likely to exist at the base of the dune sand comprising quartzite cobbles and boulders in a clayey grit matrix before encountering the underlying bedrock. In general, the upper material comprising a brown to orange brown, loose, sand and varies in thickness between 1.5 and >3.0m. Below these depths, the subsoils become reddish brown and more clayey and increase in consistency, becoming medium dense to dense, with increasing depth below the site.

In general, the slope angles in the area of the proposed development varies between 0° and about 4°. As such, in general, no slope stability problems are anticipated on this site.

The sandy soils show signs of being erodible by water. Subsoil or surface seepage are not expected to be problematic in the sandy soils occurring on this site. However, in some instances, a perched water table may occur where sand overlies clayey sands or sandy clays or residual tillite, during periods of high rainfall.

Implication / Risk / Impact:

- The sandy nature of the soils make them highly susceptible to erosion.
- The potential risk to surrounding old buildings was raised by I&APs, as a result of the use of heavy equipment during construction.

Mitigation / Recommendations:

- As the sands are considered highly erodible the control of stormwater on the site is essential, both during construction and after completion of the development.
- It is imperative that site drainage and landscaping is implemented in all areas to prevent surface ponding.
- Permanent cut slopes should be restricted to a batter of 1:2, and fills should be restricted to a slope batter of 1:1.75.
- All cut and fills must be topsoiled and suitably vegetated as soon as possible after construction to reduce the risk of erosion and instability due to infiltration.
- A suitably trained engineer must assess the stability of existing old buildings in close proximity to the site, and confirm whether the use of heavy equipment during construction will likely lead to deterioration of the old buildings. If a risk is identified, alternative equipment must be use.

6.4 GROUND AND SURFACE WATER

Description:

The findings of the specialist Wetland Delineation, Health and Functional Assessment undertaken by Sivest revealed that there are no wetlands or any other natural or artificial surface water resources on or adjacent to the study site (refer to Appendix P). The proposed development site is also located well out of the 1:100 year floodline of the nearest river, which is the Isipingo River to the south west of the site. Subsoil or surface seepage is also not expected to be problematic in the sandy soils occurring on this site.

Implication / Risk / Impact:

As the proposed residential development will be connected to Municipal waterborne sewage, and as no wetland or any other natural or artificial surface water resources are present on or in close proximity to the development site, the potential impact of the proposed development on surface and groundwater resources will be minimal.

Mitigation / Recommendations:

- It is imperative that site drainage and landscaping is implemented in all areas to prevent surface ponding.
- A site specific stormwater management system that meets Municipal requirements for stormwater attenuation and management must be implemented for the proposed development for both the construction and operational phases.

6.5 FLORA

Description:

A Biodiversity Assessment was conducted by Peter le Roux and Dr. Hans Grobler (refer to Appendix N). The proposed development site falls within the KwaZulu-Natal Coastal Belt vegetation unit, which is ranked as critically endangered and classified as a Biodiversity Priority Area 1 (CBA 1) by the KwaZulu-Natal Conservation Plan database. Under natural conditions the development site would have comprised subtropical coastal forest and bush. However, the site has largely been transformed by surrounding urban development and currently comprises approximately 1.5ha of wooded forest dominated by alien tree species and 1.8ha of secondary grassland and mowed lawn.

Implication / Risk / Impact:

- The vegetation on the proposed development site is largely transformed and is not representative of KwaZulu-Natal Coastal Belt vegetation.
- No indigenous plants of conservation concern were found on the site and there were no ecological links to adjacent land with conservation-worthy features.
- Failure to control the spread of alien invasive plant species on the development site may result in the spread of invasive vegetation to adjacent areas.

Mitigation / Recommendations:

- All alien vegetation on the site must be removed.
- The alien vegetation management programme contained within the EMPr (Appendix M), must be implemented for both the construction and operational phases.
- Only locally indigenous plant species must be used for landscaping around the proposed residential development.

6.6 FAUNA

Description:

A Biodiversity Assessment was conducted by Peter le Roux and Dr. Hans Grobler (refer to Appendix N). The study concluded that the proposed development site is highly degraded with a low biodiversity value and no species of conservation of concern could be found on the site. Without links and corridors to more suitable habitats the site has no real conservation value.

Implication / Risk / Impact:

• None.

- Only locally indigenous plant species must be used for landscaping around the proposed residential development. Such vegetation may provide refuge and food for bird and butterfly species.
- The alien vegetation management programme contained within the EMPr (Appendix M), must be implemented for both the construction and operational phases.

7. SPECIALIST STUDIES: KEY FINDINGS AND RECOMMENDATIONS

The following Specialist Studies are included in the Report:

- Biodiversity Assessment including a floral and faunal study;
- Heritage Impact Assessment;
- Socio-Economic Survey;
- · Traffic Impact Assessment;
- · Wetland, Delineation, Health and Functional Assessment;
- · Geotechnical Assessment:
- Stormwater Management Plan;
- · Civil Design Study; and
- 1:100 Year Floodplain Layout.

7.1 BIODIVERSITY ASSESSMENT

A specialist Biodiversity Assessment comprising both a floral and faunal component was undertaken for the proposed residential development site by Peter le Roux and Dr. Hans Grobler, dated April 2017. Refer to Appendix N. The aims of the biodiversity study were to assess the biodiversity components of the proposed development site, and report on sensitive areas with development constraints, as well as provide mitigation measures and alternatives.

Floral component:

The proposed development site on Portions 4 and 7 of Erf 2363 Isipingo comprise two distinct vegetation types; comprising approximately 1.5ha of wooded forest dominated by alien tree species and 1.8ha of secondary grassland and mowed lawn. The mowed lawn area contained low species diversity and a few large alien trees. The alien tree forest portion was dominated by large mango and syringa trees with alien creepers in sub-canopy and open canopy areas. It was also highly disturbed and littered with rubble, old and recent dump sites, fallen trees and alien creepers covering the ground and sub-canopy. A few scattered indigenous trees were present, mostly *Ficus natalensis*, *Trema orientalis* and *Albizia adianthifolia*.

The proposed development site falls with the KwaZulu-Natal Coastal Belt vegetation unit which comprises the KwaZulu-Natal Coastal Belt Grassland and Moist Coastal Lowlands Forest vegetation subgroups. Both these vegetation groups are classified as Critically Endangered. However, in the case of the study site, the on-site vegetation is not representative of these habitats. No indigenous plants of conservation concern were found on the site and there were no ecological links to adjacent land with conservation-worthy features.

Mitigation / Recommendations:

• No special measures are recommended for protection/rescue of indigenous plants or habitats.

Faunal component:

- The proposed development site is highly degraded with a low biodiversity value and comprising of no species of conservation value. The absence of suitable habitats and connecting corridors confirmed the lack of species within the development site.
- Without links and corridors to more suitable habitats, the proposed development site has no real conservation value.

Mitigation / Recommendations:

• None.

7.2 HERITAGE ASSESSMENT

A specialist Heritage Impact Assessment was undertaken for the proposed residential development site by Active Heritage cc. dated August 2016. Refer to Appendix O. The aims of the heritage study was to identify any features, sites or landscape within the development footprint that may be of conservation significance, as well as to provide mitigation measures and alternatives. The findings of the study reveal that proposed development site contains no heritage features and is not part of any known cultural landscape. However, the graveyard of Dick King is situated approximately 90m to the east of the development site. This graveyard also includes some of the King family members and is a declared Grade II Provincial heritage site. The site is therefore recorded on the provincial heritage site register of Amafa and has a high heritage status. It may not be altered or destroyed.

In addition to the Dick King Graveyard, the Isipingo Cemetery is located behind the Dick King Graveyard, directly adjacent to the north eastern boundary of the development site. The cemetery has graves dating from as far back as the 1860's onwards. The old Isipingo Cemetery is rated as locally significant. This largely abandoned and overgrown.

There is a possibility that some graves may be hidden in the dense vegetation on the north eastern section of the footprint. These would be a spill over from the old Isipingo Cemetery. However, none were observed during the field survey.

Mitigation / Recommendations:

- A buffer of at least 30m must be maintained around the Isipingo Cemetery.
- In addition, it is strongly recommended that a sturdy fence must be erected between the Isipingo Cemetery and the proposed development area before any construction work commences.
- In the unlikely event that the development expose any graves on the footprint it is imperative that all construction cease and the local heritage agency Amafa or a heritage consultant be contacted for further evaluation.
- Attention is drawn to the National Heritage Resources Act, 1999 (Act No. 25 of 1999) which, requires
 that operations that expose archaeological or historical remains as well as graves should cease
 immediately, pending evaluation by the provincial heritage resources authority.

7.3 SOCIO-ECONOMIC SURVEY

A specialist Socio-Economic Survey was undertaken as part of the proposed Kanku Road residential development project by Mabune Consulting dated October 2017. Refer to Appendix K. The aim of the study was to identify the social and economic elements of the proposed development based on the opinions and views of the surrounding Isipingo Hills community. Socio-economic information was collected through field surveys. The survey aimed to target 30% of the number of households within four identified areas surrounding the proposed development site.

A survey questionnaire, addressing variables at both individual person level and household level was developed for the purpose of the survey.

The survey process was completed over a period of four days. To reach the 30% level of representation, 200 households had to be surveyed. All properties as identified were approached but a number of people did not want to participate, in these cases the neighboring properties were approached for the survey interview. The final result of the survey was 103 completed questionnaires which translated to a 15% representation of the total number of households within the identified area. The survey results were then compared with the trends from the 2011 Census data for the area.

The results of the socio-economic survey revealed:

- The average household size is 5 people per households.
- Majority of respondents are married.

- 95% of respondents are endemic to the KZN Province, of which 90% indicated that they were born within the eThekwini Metro Municipality.
- The vast majority of people have been living at their current address for more that 5 years.
- Approximately 75% of respondents are between the ages of 18 64 years, thus falls within the economically active age group.
- 52% of respondents within the study area are Black African, with an additional 47% being of Indian or Asian descent.
- Less than 3% of respondents within the area are disabled.
- Approximately 15% of respondents currently receive some form of government support through a social grant of which 75% are Old Age State Pension recipients.
- Approximately 48% of respondents indicated that they have some form of Tertiary Education Qualification.
- Large proportion of respondents are self-employed, 44%.
- There was a reluctance from respondents to provide financial information, with 64% not providing a response.
- 93% of respondents indicated that they have access to a private vehicle either as driver or a passenger.
- The properties are largely owned by the respondents (96%), with the majority already paid off (45%).

During the sample survey approximately 68% of respondents indicated that they are aware of the proposed Kanku Road Development. Of the survey respondents, approximately 42% indicated that they supported to proposed development due to the high housing demand within the area. The main reasons given by the respondents opposing the proposed development was related to their perceive idea that the development will result in an increase to the already high crime levels of the area as well as the negative impact the development could have on their property values. Other opposing comments included the lack of infrastructure capacity and increased traffic volumes.

- It will be imperative to the success of this housing project that cognisance be taken of the opposing comments and measures be put in place to address the community's concern.
- The SAPS and Metro Police should be engaged to devise a safety and security strategy for the area.
- The community must be encouraged to establish an active Community Policing Forum.
- The development architecture and finishes should take into account that of the existing area. The
 Municipality should regularly inspect the area and more specifically the development to ensure no illegal
 land use activities take place that could potentially have a negative impact on the community or their
 property values.
- Prior to project implementation the recommendations contained in the specialist Traffic Impact Assessment must be implemented.
- Commitment from the City needs to be in place to ensure the infrastructure within the area can sustain the additional units and funding must be made available for any upgrade needed to existing infrastructure prior to construction of the developments.
- The number of people per unit must be limited to the actual unit designed size. Community members should be encourage to notify the Municipality should overcrowding take place to enable the Municipality to act accordingly.
- Municipal bylaws in terms of noise and unruly behaviour should be implemented. The community should also report such instances to the police for action.
- Clarity should be provided to community members during the Environmental Authorisation process and Town Planning Application in terms of who the anticipated beneficiaries of the residential development would be.

7.4 TRAFFIC IMPACT ASSESSMENT

A specialist Traffic Impact Assessment was undertaken for the proposed Kanku Road residential development project by BIS Consulting Traffic and Transportation Engineering, dated November 2017. Refer to Appendix L. The aim of this study was to investigate the traffic impact of the proposed development on the existing transportation network and to make comments on the traffic circulation, access arrangements and parking provision within the development site. The most appropriate upgrades and / or mitigation measures required to alleviate impacts were also recommended.

The area surrounding the proposed development site is characterised by low to medium density residential, retail and industrial land-uses. The proposed development will therefore be compatible with the surrounding land-uses. The development site is well served on a wider and local scale by a number of major roads, including Phila Ndwandwe Road, Jeffels Road and the N2 National Freeway to the east, Wanda Cele Road and Platt Drive to the South, and Saunders Avenue to the north. Access to the development will be provided via the cul-de-sac off Kanku Road.

In order to determine road operating conditions on the surrounding road network, the Kanku Road / Sucrose Road intersection, as well as the Cypress Avenue / Sucrose Road intersection were analysed as all vehicles accessing the site will do so via these intersections. In addition, the Sucrose Road / Saunders Avenue intersection was also analysed due to the close proximity of this intersection to the proposed development.

The results of the assessment revealed that the traffic volumes along Kanku Road, Sucrose Road and Cypress Avenue fall well below the calculated capacity for these roads. On-site observations during the AM and PM peak hours were conducted in order to identify potential operating constraints within the surrounding road network. Buses and minibus taxis were observed picking up and dropping off passengers along Phila Ndwandwe Road, in close proximity to the Development Site. Phila Ndwandwe Road is a major Public Transport Corridor.

Under the proposed zoning of "Reservation of Land", there is no parking requirement. Based on the proposed land-use and the demographics of the associated target market, a parking rate of 1 bay per 5 units was deemed sufficient for the development. It can therefore be assumed that the development will be sustained predominantly by public transport. In addition, the site is located less than 1 km from major Public Transport Depots. The KwaMashu Train Station is located approximately 900m north of the site. A large proportion of trips to and from the development will therefore be on foot.

There are currently no pedestrian sidewalks provided along Sucrose Road or Kanku Road. A pedestrian sidewalk assessment was therefore undertaken. The assessment found that the roads have considerably wide road verges which means that there is sufficient space available to the pedestrians currently utilising these routes. Pedestrian sidewalks along Sucrose Road and Kanku Road will not be required.

The Traffic Impact Assessment concluded that there is currently capacity available within the surrounding road network to accommodate the added trips generated by the proposed development.

- There are no external roads and / or intersection upgrades required as a result of this proposed development.
- The development access off Kanku Road must be between 6m and 9m in width which should allow for adequate movements into and out of the site. All internal roads should be a minimum of 5.5m in width to allow for adequate internal movements.
- With regards to the design of the parking layout, the following requirements must be taken into account:
 - All vehicles are to enter and exit the site in forward gear.

- The Development Layout must make sufficient provision for the turning movements of all vehicles within the site boundaries.
- All parking facilities, accesses and driveways to be designed and dimensioned in accordance with the schedule of guidelines for off street parking.
- All driveway ramps are to have a maximum gradient of 15% with a minimum 30m vertical curve radius.

7.5 WETLAND ASSESSMENT

A specialist Wetland Delineation, Health and Functional Assessment of the proposed development site was undertaken by Sivest dated October 2014. Refer to Appendix P. The aim of the wetland study was to identify and delineate any potential wetlands on the proposed development site. No wetland or any other natural or artificial surface water resources were identified on the study site. Therefore no potential impacts are anticipated from a wetlands perspective which can be expected to occur throughout the lifecycle (from pre-construction to decommissioning) of the proposed development.

Mitigation / Recommendations:

- From a wetlands perspective, the current design can be implemented without potential impact to any wetlands on the proposed development site.
- Before construction however, considering best environmental practice, it is recommended that a tree specialist should identify indigenous higher order trees located on the site to ensure affected indigenous and / or potentially protected trees are identified, marked and avoided during the construction phase.
- All alien vegetation is to be removed.

7.6 GEOTECHNICAL ASSESSMENT

A specialist Phase 1 level Geotechnical Investigation for the proposed Kanku Road residential development site was undertaken by Drennan Maud (Pty) Ltd, dated February 2015. Refer to Appendix Q. A field investigation was undertaken which comprised the logging of exposures on the site, hand auger boring and dynamiccone penetrometer testing. In addition, two percolation tests were carried out and selected samples of the materials occurring on the site were taken for laboratory testing.

The results from the geotechnical investigation confirm that the development of the site is feasible provided that the recommendations given in the specialist Geotechnical Investigation Report are taken into consideration in the planning and the development of the site.

- For individual site classifications, a Phase 2 level Geotechnical Investigation must be carried during construction as the earthworks carried out may alter the classification.
- In order to maintain long term stability all cut banks in the upper loose sands should be laid back to a slope angle of 1:2 (26°), and in the more clayey Berea Formation sediments to a slope angle of 1:1.75 (30°).
- For temporary foundation excavations should these be required, slopes may be steepened to a batter of 1:1 (45°) but should be restricted to a height of no more than 3m.
- It must be understood that any unretained cut banks steeper than the above should be considered potentially unstable. As such, where excavations exceed a depth of about 1.2metres and are not suitably battered back they must be shored or laterally supported.
- Prior to the construction of any fill, all topsoil containing vegetation and organic material, should be removed and stockpiled for later use.
- Should the construction of any fill be required on slopes steeper than 1:6 (10°), as may possibly in the south western portion of the site, these must be benched into the underlying insitu soils.
- Any fill embankment should be constructed in layers, a maximum loose thickness of 300mm and each
 layer should be compacted to a minimum of 93% and 95% of the materials maximum Mod AASHTO
 density for the sandy clay and sandy material respectively, prior to the placement of the next layer.

- The maximum slope angle of any fill must be restricted to 1:1.75 (30°). The fills must be adequately grassed as soon as possible after construction.
- Due to the sandy nature of the subsoils occurring on site, stormwater control is essential to prevent
 erosion and sloughing of the subsoils. This is essential both during and after construction and adequate
 protection against erosion from stormwater should be provided on both a temporary and permanent
 basis.
- It should be understood that strict control of the stormwater disposal must be carried out to ensure that stormwater from soakpits does not concentrate in the sandy subsoils above the more clayey soils, resulting in liquefaction of the sands. In this regard, stormwater soakpits should be designed to the requirements of 1m³ of voided soakpit volume per 40m2 of roof and paved area for the residential development.
- In addition, all stormwater soakpits must have an emergency overflow discharging into a suitably designed spreader system.
- Notwithstanding the above, subsoil drains may be required in the eastern sector to prevent further erosion of the sandy soils.
- Control and discharge of stormwater from roads in the area will have to be carefully assessed and should be incorporated into the overall stormwater disposal system which should be approved by the Local Authority in respect of its discharge off the site.
- After construction the site should be graded to facilitate stormwater runoff and prevent ponding of stormwater on surface adjacent to any of the structures.

7.7 CIVIL DESIGN

A Civil Design Study was undertaken by Map Africa Consulting Engineers, dated November 2017, to outline the required civil engineering aspects and related preliminary design criteria for the proposed Kanku Road residential development. Refer to Appendix C. In addition, a site specific Stormwater Management Plan was compiled by Gendu Consulting, dated October 2017. Refer to Appendix D.

Roads

The proposed development will include internal roads comprising cul-de-sac and access ways. The cul-de-sac roads will have 8/10.5m road reserves with 4.5/7m wide roads. The access ways will have 10.5m road reserves with 4.5m wide roads. All roads will be surfaced with concrete kerbing on one side to act as a drainage channel and to allow for stormwater from the housing units to discharge onto the roads.

Access to the development is proposed to be off Kanku Road via an entrance roundabout. The existing Kanku Road and Yellowwood Grove intersection will be formalised into a new multi-leg traffic circle as part of the proposed development. There are no external roads or intersection upgrades required as a result of this proposed development.

Stormwater

The Stormwater Management Plan compiled for the proposed development site divides the 4ha site into two catchment areas based on the natural flow of the land being in different directions. Area 1 is 1.9ha in extent and Area 2 is 2.1ha in extent. Stormwater design calculations were undertaken for each area and each area is to have its own attenuation pond and retention facilities to ensure that the post-development runoff will be limited to the pre-development runoff levels. Pond 1, to cater for catchment Area 1 will have an approximate capacity of 180m3 and will be located on the eastern boundary of the site. Pond 2, to cater for catchment Area 2, will have an approximate capacity of 140m³ and will be located on the south western corner of the site. The proposed development site is located outside of the 1:100 year flloodline of the nearest river, the Isipingo River, which lies to the south west of the site.

The two attenuation ponds will comprise concrete lined ponds which will be designed to be constantly dry (i.e. water is facilitated to flow from the outlet headwall to an inlet discharge sump). The ponds have been designed with emergency overflow measures which allow for drainage when storm peaks are in excess of

the 1:50 post development scenario. For health and safety reasons no water will be retained in the ponds under normal conditions.

In terms of the internal stormwater management, the internal roads will be designed to accommodate the platform and roof runoff. Stormwater surface runoff will be directed from the platforms and roofs to the road surface to discharge into side inlet drains at strategic points and directed into sub surface concrete spigot and socket pipes system. These pipe systems will then discharge via headwall outlets with erosion protection into the attenuation ponds.

Sewer

There are existing Municipal bulk sewer lines located along the south western and south eastern portions of the site. It is proposed to tie the new sewer reticulation for the residential development into the existing bulk Municipal system at two separate connection points. The residential development will produce an additional average daily discharge of 0.27 Mega litres of sewage per day. This additional discharge will be distributed between the two connections.

The first proposed connection point is located in the south western portion of the site and will link into an existing 150mm diameter Municipal bulk line and will service 53% of the development. The existing 150mm diameter line discharges into the Flamboyant Road Pump Station which is located approximately 690m from the development site.

The second proposed connection point is located in the south eastern portion of the site and will link into an existing 200mm diameter Municipal bulk line and will service 47% of the development. The existing 200mm diameter line discharges into the Avenue East Pump Station which is located approximately 1.8km away from the development site.

Full waterborne sanitation will be designed with the provision for servicing each site. All mainline sewers will be 160mm diameter and house connections will be 110mm diameter. All pipes will be heavy duty uPVC pipes that comply with SABS 791.

The eThekwini Municipality's Water and Sanitation Department has confirmed that the existing Municipal bulk sewer pipe network has sufficient capacity to cater for the additional discharge generated from the proposed new development. However, the existing sewer pump station at both Avenue East and Flamboyant Road does not have sufficient capacity to cater for the additional discharge generated from the proposed development and will require upgrading.

Two options for the upgrade of the Flamboyant Drive sewer pump station have been considered with the preferred option being that the existing sewer pump station at Flamboyant Drive be upgraded (including new rising main) and rerouted through to the Isipingo Wastewater Treatment Works.

Map Africa Consulting Engineers have begun investigations relating to the engineering works for the sewer pump station upgrade which is being conducted concurrently with the proposed Kanku Road residential development project.

Water Reticulation

There is an existing 100mm diameter Municipal bulk watermain located along Kanku Road at the main access way of the site. It is proposed to link the development into the bulk watermain at one point. Confirmation has been received from the eThekwini Water and Sanitation Planning Branch that there is available capacity within the existing Municipal bulk water system to accommodate the additional water demand generated by the proposed new residential development.

The Kanku Road residential development is expected to require an average daily water demand of 0.270ML and peak daily demand of 0.351ML. A 75mm diameter pipe will be used to service the development and will be connected to the existing 100mm water supply line.

The supply reservoir in the area is the Isipingo Hills Reservoir which has a capacity of 22.9ML. The potable water demand in the area is currently approximately 11.3ML.

Electricity Supply

Ethekwini Municipality's Electrical Department are the local authority the electrical supply to the area. Based on preliminary discussions with the Electricity Department, a new electrical substation may be required to supply the site. There are existing electrical services running adjacent to the site which supply the surrounding formal dwellings alongside the site. Once the preliminary layout drawings have been approved, the layouts will be issued to the following service providers to provide current and future service duct (electrical, telecoms etc.) requirements:

- · eThekwini Electricity Department;
- · Telkom; and
- Neotel.

Allowances have been made, within the Project Engineering Costs, for new ducts for these service providers.

7.8 1:100 FLOOD PLAIN LAYOUT

The 1:100 Floodplain Layout was compiled by Map Africa Consulting Engineers, dated March 2017 for the study site to determine whether the development site falls within a floodplain. Refer to Appendix S. It was concluded that the proposed residential development site does not fall within the 1:100 floodplain or any surface water resources such as the Isipingo River.

Mitigation / Recommendations:

None.

8. ASSESSMENT OF ENVIRONMENTAL IMPACTS

In order to assess potential environmental issues associated with the proposed development, each aspect addressed in Section 5 and 6 have been given a qualitative rating in relation to its environmental impact (Table 3). Each aspect has been divided into a number of different classes, each of which has been assigned various criteria.

Where relevant, the following methods have been used to predict the characteristics of identified impacts:

- Professional judgement;
- Quantitative mathematical models;
- Experiments and physical models;
- Physical or visual simulations or maps (including GIS tools);
- Case studies; and
- · Past experience.

Table 3: Summary of aspects used for assessing environmental impacts

ASPECT	CLASS	CRITERIA								
	Positive	The impact on the environment will be positive.								
	Negative	The impact on the environment will be negative.								
	Direct	The impact is caused directly by the activity and generally								
	Direct	occurs at the same time and at the place of the activity.								
NATURE OF	Indirect	The impact induces changes that may occur as a result of the								
IMPACT	mairect	activity.								
		The impact is a result from the incremental impact of the								
	Cumulative	proposed activity on a common resource when added to the								
	Cumulative	impacts of other past, present or reasonably foreseeable future								
		activities.								
	Construction	The impact will happen during construction.								
OCCURRENCE	Operation	The impact will happen during operation.								
OF IMPACT	Decommissioning	The impact will happen during decommissioning.								
OI IIIII AOI	Immediate	The impact will happen immediately								
	Delayed	There will be a delay in the impact occurring.								
PROBABILITY	Definitely	The impact will definitely occur even with mitigation (100%).								
OF IMPACT	Likely	It is likely that the impact will occur (60%-99%).								
OCCURRING	Fair	There is a fair chance that the impact will occur (30% -59%).								
(with mitigation)	Unlikely	It is unlikely that the impact will occur (0% - 29%)								
REVERSIBILITY	Possible	It is possible to reverse the impact.								
(with mitigation)	Partly	It is partly possible to reverse the impact.								
(with finingation)	Not possible	It is not possible to reverse the impact.								
EXTENT OF	Site	The impact will be limited to the site.								
IMPACT Local		The impact will affect the local area (within a radius of 40km).								

(with mitigation)	Provincial	The impact will affect areas beyond the site but within the boundaries of KwaZulu-Natal.
	National	The impact will affect areas beyond the Province but within the boundaries of South Africa.
	Short-term	0-5 years (construction phase).
DURATION	Medium-term	5-40 years (construction and operation).
(with mitigation)	Long-term	(>40 years).
	Permanent	Permanent damage to the environment.
SIGNIFICANCE	Low	Small impact / disturbance.
OF IMPACT	Medium	Moderate impact / disturbance expected.
WITHOUT MITIGATION	High	Significant impact / disturbance expected.
SIGNIFICANCE	Low	Small impact / disturbance.
OF IMPACT	Medium	Moderate impact / disturbance expected.
POST- MITIGATION	High	Significant impact / disturbance expected.

Table 4 lists potential impacts associated with the proposed development, and details what mitigation measures should be taken to minimize these impacts.

 Table 4: Assessment of potential impacts associated with the development:

DESCRIPTION OF IDENTIFIED ENVIRONMENTAL IMPACT		MITIGATION	OF IMPACT	HICH IMPACT CAN BE MITIGATED	PROBABILITY OF IMPACT OCCURRING		REVERSIBILITY OF IMPACT		EXTENT OF IMPACT		DURATION OF IMPACT		NIFICANCE OF IMPACT WITHOUT MITIGATION	E OF IMPACT WITH MITIGATION
		NATURE C	DEGREE TO WH	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	SIGNIFIC, WITH	SIGNIFICANCE	
LOCAL ECONOMY AND EMPLOYMENT OPPORTUNITIES	The proposed residential development will result in the generation of job opportunities during the construction phase and provision of residential infrastructure.	Local businesses and unemployed people in the immediate area must be considered first, before employing labour and services from further afield.	Positive Direct	1	Definite	Definite	1	1	Local	Local	Short-term during Construction.	Short-term during Construction.	High Positive	High Positive

	SCRIPTION OF IDENTIFIED ENVIRONMENTAL IMPACT MITIGATION MITIGATION MITIGATION PROBABILITY OF IMPACT OCCURRING PROBABILITY OF IMPACT OCCURRING WITHOUT WITH WITHOUT WITH MITIGATION		F IMPACT	DURATION OF IMPACT		SIGNIFICANCE OF IMPACT WITHOUT MITIGATION	SIGNIFICANCE OF IMPACT WITH MITIGATION							
			NATURE O	DEGREE TO WHI	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	SIGNIFICA	SIGNIFICANC
NEED AND DESIRABILITY	The proposed residential development will result in job creation, skills development and income generation. It will also help to address the housing backlog in the area, by providing housing for families currently residing in the Isipingo Transit Camp. The proposed development will result in the loss of Public Open Space. The proposed development may result in negative socio-economic impacts including increased crime, devaluation of properties, unruly behaviour, overcrowding, noise and aesthetic impacts.	Local businesses and people must be employed before sourcing skills from further afield. The use of local contractors, suppliers and service providers must be undertaken. The Municipality and community must work with the SAPS and Metro Police to devise a safety and security strategy for the area. The community should be encouraged to establish an active Community Policing Forum. The development architecture and finishes should take into account that of the existing area. The Municipality should regularly inspect the area and more specifically the development to ensure no illegal land use activities take place that could potentially have a negative impact on the community or their property values. The proposed development must be conducted in such a manner as not to impose undue risk or negative impacts on the quality of lives of the surrounding residential communities. The number of people per unit must be limited to the actual unit designed size. Municipal bylaws in terms of noise and unruly behaviour should be implemented. The community should also report such instances to the police for action.	Positive Direct and Indirect	•	Definite	Definite			Local	Local	Short-term during Construction. Medium-term during Operation.	Short-term during Construction. Medium-term during Operation.	High Positive	High Positive
LANNING INITIATIVES	The proposed project is directly in line with the Municipal goals and objectives through the need to address the housing and infrastructure backlog through infill development on vacant or underutilized land and the provision of employment opportunities.	None	Positive Direct and Indirect	•	Definite	Definite		1	Local		Medium-term & long-term	Medium-term & long-term	High Positive	High Positive

	CRIPTION OF IDENTIFIED	MITIGATION	MITIGATION	OF IMPACT	CH IMPACT CAN BE MITIGATED	III	BILITY OF IPACT URRING		BILITY OF IPACT	EXTENT (OF IMPACT		ION OF IPACT	SIGNIFICANCE OF IMPACT WITHOUT MITIGATION	E OF IMPACT WITH MITIGATION
			NATURE C	DEGREE TO WHICH	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	SIGNIFICA	SIGNIFICANCE	
CULTURAL AND HISTORICAL RESOURCES	There are no identified heritage sites or features on the proposed development footprint. However, the Dick King Graveyard, which is a Grade II Provincial heritage site is situated approximately 90m to the east of the development site. The old Isipingo Cemetery also borders the north eastern boundary of the site and is rated as locally significant. All human remains have high heritage significance at all levels due to their social value and may not be altered without permission of the families concerned and a permit from Amafa. There is a small possibility that some graves may be hidden in the dense vegetation on the north eastern section of the proposed development site. These would be a spill over from the old Isipingo Cemetery.	 A 30m no-development buffer be maintained around the cemeteries during all phases of the project. A sturdy fence must also be erected between the old Isipingo Cemetery and the north eastern section of the development site prior to the commencement of any construction activities. In the unlikely event that the development expose any graves on the development footprint it is imperative that all construction cease immediately and the local heritage agency Amafa or a heritage consultant be contacted for further evaluation. Attention is drawn to the National Heritage Resources Act, 1999 (Act No. 25 of 1999) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage resources authority. 	Negative Direct	Highly likely	Likely	Unlikely	Possible	Possible	Local	Local	Medium-term	Medium-term	Med	Low	

DE	SCRIPTION OF IDENTIFIED ENVIRONMENTAL IMPACT	MITIGATION	F IMPACT	DEGREE TO WHICH IMPACT CAN BE MITIGATED	IN	PROBABILITY OF IMPACT OCCURRING		REVERSIBILITY OF IMPACT		EXTENT OF IMPACT		DURATION OF IMPACT		SIGNIFICANCE OF IMPACT WITH MITIGATION
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SURROUNDING LANDUSE AND AESTHETICS	The proposed development will alter the land where the infrastructure is established. The proposed development will require the closure of Public Open Space and application for rezoning. The proposed development may have a negative impact on the surrounding Isipingo Hills residents associated with increased noise, congestion and aesthetic impacts. The proposed development may impact negatively on the Isipingo Cemetery if the cemetery is not adequately cordoned off. The proposed development may result in the devaluation of properties in the area as the project entails the construction of high density, Municipal housing in a medium density residential area.	Architectural controls must ensure that the new infrastructure will blend in with the existing residential developments in the area; It is essential that a 30m no-development buffer be maintained around the cemetery during all phases of the project. A sturdy fence must be erected between the old Isipingo Cemetery and the north eastern section of the development site prior to the commencement of any construction activities. Noise impacts must be controlled. The development architecture and finishes should take into account that of the existing area. The Municipality should regularly inspect the area and more specifically the development to ensure no illegal land use activities take place that could potentially have a negative impact on the community or their property values. The proposed development must be conducted in such a manner as not to impose undue risk or negative impacts on the quality of lives of the surrounding residential communities. The number of people per unit must be limited to the actual unit designed size. Community members should be encourage to notify the Municipality should overcrowding take place to enable the Municipality to act accordingly. Municipal bylaws in terms of noise and unruly behaviour should also report such instances to the police for action.	Negative Direct &	Partly	Definitely	Fair	Not Possible	Possible	Site & local	Site & local	Long-term	Medium-term	High	Med

	SCRIPTION OF IDENTIFIED ENVIRONMENTAL IMPACT	MITIGATION	MITIGATION				CH IMPACT CAN BE MITIGATED	IM	ILITY OF PACT URRING		BILITY OF IPACT	EXTENT C	OF IMPACT	DURAT IM	ION OF PACT	SIGNIFICANCE OF IMPACT WITHOUT MITIGATION	SIGNIFICANCE OF IMPACT WITH MITIGATION
			NATURE OF IMPACT	DEGREE TO WHICH	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	SIGNIFICA WITH	SIGNIFICANC			
RAFFIC, ROADS AND ACCESS	The proposed residential development will result in the increase in pedestrian traffic.	Access to the development must be provided off Kanku Road. There are no external roads and / or intersection upgrades required as a result of the proposed development. It is recommended that warning signage be erected to warn motorists of slowmoving vehicles during the construction phase.	Negative Direct	Partly	Definitely	Definitely	Partly	Possible	Site & local	Site & local	Short-term during Construction. Medium-term during Operation.	during Construction. Medium-term during	Гом	Low			
CONSTRUCTION ACTIVITIES, NOISE AND DUST	The construction phase will generate noise from the use of construction machinery and increased traffic (construction vehicles) and dust. There will also be a number of people in the area due to the presence of construction labourers on the site, as well as other potential job seekers. During the operational phase, vehicle movement to and from the residential site and the presence of the residents on the site will result in additional noise. Noise nuisance may negatively impact surrounding local residents within the area if mitigation measures are not adequately implemented.	Construction activities should be limited to working hours between 7.30am and 5pm during weekdays. Construction on weekends and public holidays should not be permitted. Machinery and equipment must be maintained and regularly serviced to ensure that unnecessary noise is prevented. Workers on site must not create unnecessary noise such as hooting or shouting. Dust from the construction site must be managed in an efficient and environmentally sensitive manner; Speed limits must be adhered to at all times. Residential controls must be put in place during the operation phase to prohibit residents from making loud noise at night, such as loud music from parties, etc.	Negative Direct	Partly	Definitely	Fair	Partly	Partly	Site & local	Site & local	Short-term during Construction. Medium- term during Operation.	Short-term during Construction. Medium- term during Operation.	High	Med			

DESCRIPTION OF IDENTIFIED ENVIRONMENTAL IMPACT		MITIGATION	F IMPACT	DEGREE TO WHICH IMPACT CAN BE MITIGATED	PROBABILITY OF IMPACT OCCURRING		REVERSIBILITY OF IMPACT		EXTENT OF IMPACT		DURATION OF IMPACT		SIGNIFICANCE OF IMPACT WITHOUT MITIGATION	SIGNIFICANCE OF IMPACT WITH MITIGATION
			NATURE OF IMPACT		WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	SIGNIFICA	SIGNIFICANC
SECURITY	The construction phase will result in an increase in the number of people in the area due to the presence of construction labourers on the site, as well as other potential job seekers. The operational phase of the project will result in a large influx of residents onto the site. Security will be required during the construction phase to manage staff and construction vehicles and materials. Potential exists for labourers to trespass onto adjoining properties. Crime in the area could increase as a result of criminals posing as people seeking employment on the site. Crime in the area may also potentially increase during the operational phase, as a result of the increase in people being relocated from the transit camp to the residential development.	 Construction labourers should be sourced from surrounding communities. All labourers must remain within the boundaries of the construction footprint at all times. Access onto and off the site must be controlled by a register system, this includes visitors. All restricted areas of the construction site must be designated with appropriate warning signs. If security issues arise, it is recommended that guards be present to look after any machinery or construction equipment that remains on site after work hours. During the operational phase representatives from the Kanku Road housing development should be encouraged to join local neighbourhood watch groups. The Kanku Road housing development must be incorporated into the existing community policing groups/forums operating in the Isipingo Hills area. 	Negative Direct	Highly likely	Definitely	Fair	Partly	Рату	Site & local	Site & local	Short-term during Construction. Medium-term during Operation.	Short-term during Construction. Medium-term during Operation.	ч <u>б</u> іН	Low
ТОРОGRАРНУ	Vegetation clearance on the site, stockpiling of soil and uncontrolled construction activities have the potential to result in soil erosion. Uncontrolled stormwater flows off the hardened surfaces may result in erosion and sedimentation impacts.	 All nearby undisturbed slopes must be protected from erosion by demarcated the construction site. No vehicular or pedestrian access should be allowed beyond the demarcated area. A site specific stormwater management system that meets Municipal requirements for stormwater attenuation and management must be implemented. Earthworks and drainage systems should be designed in such a way that they prevent ponding. Erosion control measures must be implemented on destabilised slopes. Service trenches must be backfilled as soon as possible. Re-vegetation of exposed soil should take place as soon as possible. 	Negative Direct and Indirect	Likely	Definitely	Unlikely	Partly	Possible	Site & local	Site	Medium-term	Short-term	Med	Low

DESCRIPTION OF IDENTIFIED ENVIRONMENTAL IMPACT		MITIGATION	NATURE OF IMPACT	DEGREE TO WHICH IMPACT CAN BE MITIGATED	PROBABILITY OF IMPACT OCCURRING		REVERSIBILITY OF IMPACT		EXTENT OF IMPACT		DURATION OF IMPACT		SIGNIFICANCE OF IMPACT WITHOUT MITIGATION	SIGNIFICANCE OF IMPACT WITH MITIGATION
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CLIMATE	Topsoil which is stockpiled during the construction phase has the potential to be windblown, causing dust. Potential exists for high intensity rainstorm events to cause severe erosion at the construction site.	Appropriate measures (as outlined in the EMPr) must be taken to minimise the area of soil disturbance and the potential for the mobilisation of these bare areas. Earth dikes and diversions should be used to direct all storm flows away from the bare soil to reduce the risks of sedimentation. Sediment management during the construction phase of the development will be important. Measures should be taken to cover exposed areas during high intensity rainfall events. Rehabilitation and landscaping should take place in the wetter summer months to increase the newly planted vegetations' chance of becoming established. Construction should preferably be done during the winter months.	Negative Direct & Indirect	Partly	Likely	Fair	Partly	Possible	Site & Local	Site	Medium-term	Short-term	Med	Low
GEOLOGY AND SOILS	The sandy nature of the soils make them highly susceptible to erosion. The potential risk to surrounding old buildings was raised by I&APs, as a result of the use of heavy equipment during construction.	As the sands are considered highly erodible the control of stormwater on the site is essential, both during construction and after completion of the development. It is imperative that site drainage and landscaping is implemented in all areas to prevent surface ponding. Permanent cut slopes should be restricted to a batter of 1:2, and fills should be restricted to a slope batter of 1:1.75. All cut and fills must be topsoiled and suitably vegetated as soon as possible after construction to reduce the risk of erosion and instability due to infiltration. A suitably trained engineer must assess the stability of existing old buildings in close proximity to the site, and confirm whether the use of heavy equipment during construction will likely lead to deterioration of the old buildings. If a risk is identified, alternative equipment must be use.	Negative Direct and Indirect	Partly	Definitely	Unlikely	Partly	Possible	Site & Local	Site	Medium-term	Short-term	Med	Low

DESCRIPTION OF IDENTIFIED ENVIRONMENTAL IMPACT		MITIGATION	OF IMPACT	DEGREE TO WHICH IMPACT CAN BE MITIGATED	PROBABILITY OF IMPACT OCCURRING		REVERSIBILITY OF IMPACT		EXTENT OF IMPACT		DURATION OF IMPACT		SIGNIFICANCE OF IMPACT WITHOUT MITIGATION	SIGNIFICANCE OF IMPACT WITH MITIGATION
			NATURE O		WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION	SIGNIFICA	SIGNIFICANCI
SURFACE AND GROUNDWATER	As the proposed residential development will be connected to Municipal waterborne sewage, and as no wetland or any other natural or artificial surface water resources are present on or in close proximity to the development site, the potential impact of the proposed development on surface and groundwater resources will be minimal.	It is imperative that site drainage and landscaping is implemented in all areas to prevent surface ponding. A site specific stormwater management system that meets Municipal requirements for stormwater attenuation and management must be implemented for the proposed development for both the construction and operational phases.	Negative Direct and Indirect	Highly likely	Unlikely	Unlikely	Partly	Possible	Site & local	Site	Medium-term	Medium-term	Гом	Low
FLORA	The vegetation on the proposed development site is largely transformed and is not representative of KwaZulu-Natal Coastal Belt vegetation. No indigenous plants of conservation concern were found on the site and there were no ecological links to adjacent land with conservation-worthy features. Failure to control the spread of alien invasive plant species on the development site may result in the spread of invasive vegetation to adjacent areas.	All alien vegetation on the site must be removed. The alien vegetation management programme contained within the EMPr must be implemented for both the construction and operational phases. Only locally indigenous plant species must be used for landscaping around the proposed residential development.	Negative Direct and Indirect	Likely	Fair	Unlikely	Partly	Possible	Site & Local	Site & Local	Medium-term	Short-term	Мед	Low
FAUNA	The proposed development site is highly degraded with a low biodiversity value and no species of conservation of concern could be found on the site. Without links and corridors to more suitable habitats the site has no real conservation value.	Only locally indigenous plant species must be used for landscaping around the proposed residential development. Such vegetation may provide refuge and food for bird and butterfly species. The alien vegetation management programme contained within the EMPr (Appendix M), must be implemented for both the construction and operational phases.	Negative Direct	Highly likely	Unlikely	Unlikely	Possible	Possible	Site	Site	Medium-term	Short-term	Low	Low

9. ENVIRONMENTAL MANAGEMENT PROGRAMME

In terms of the regulations stated in Appendix 4 of Chapter 8 of NEMA, an Environmental Management Programme (EMPr) has been compiled (Appendix M), which contains guidelines for ensuring that all activities associated with the proposed development are carried out in an environmentally responsible and acceptable manner. Specific management objectives and mitigation measures have been specified for the entire duration of the development.

The EMPr is based on the principles of the NEMA as well as the recommendations made in this Report. It identifies roles and responsibilities of management personnel on site, and will be used as a framework for environmental compliance monitoring and reporting, should the proposed activity(s) be authorised.

An EMPr is a legally-binding document that contains guidelines with which land owners and contractors must comply, and which must be strictly implemented and regularly monitored. If this is done, it is likely that the majority of the potentially adverse impacts associated with proposed activities can be minimised or prevented. An Environmental Control Officer (ECO) should be appointed by the Applicant to ensure compliance with the EMPr during the construction and operational phases. Should non-compliance occur, this must be brought to the attention of the DEDTEA, who will conduct the required prosecution procedure.

Specific management objectives and mitigation measures are specified in the EMPr for the entire duration of the operation, including the following stages:

- · Construction activities;
- · Operation or undertaking of the activity;
- · Rehabilitation of the environment; and
- Closure (decommissioning), where relevant.

10. POSITIVE AND NEGATIVE IMPLICATIONS OF THE PROPOSED ACTIVITY

POSITIVE SUMMARY:

- The project will result in job creation, skills development and income generation during both construction and operation.
- The project will result in the provision of much needed housing infrastructure and therefore help address the housing backlog in the region.
- The proposed development will provide formalised housing and services to residents of the informal Isipingo Transit Camp, which will result in social upliftment and help alleviate some of the social problems often associated with informal settlements such as crime, prostitution, substance abuse and unemployment.
- The proposed development will help to alleviate the health risks to the transit camp residents and surrounding communities resulting from a lack of basic service infrastructure and poor sanitation and waste management practices at the camp.
- The relocation of the transit camp residents and closing of the transit camp will alleviate the serious negative environmental impacts that are currently occurring at the transit camp site from the influx of solid waste, raw sewage, sediment and stormwater runoff into the adjacent wetland areas that feed into the Isipingo Estuary and provide habitat for the Pickersgill Reed Frog and other frog species, birds and reptiles.
- The proposed development will result in the clearance and removal of the alien invasive vegetation on the site which will prevent the further spread of this alien vegetation to surrounding areas.
- The proposed development will enable the beneficial use of the property which is currently not being properly managed or maintained and is being used for illegal dumping and poses a security risk to the surrounding community.

NEGATIVE SUMMARY:

- Potential negative socio-economic impacts to surrounding residents associated with increased crime, noise, overcrowding and aesthetic impacts.
- Socio-economic impacts associated with the transit camp residents such as increased drug use, prostitution.
- Safety and security risks to surrounding residents;
- The proposed development will result in the loss of Public Open Space.
- Potential soil erosion at the development site during the construction phase of the project.
- Potential risk to surrounding old buildings as a result of the use of heavy equipment during construction.
- Potential damage to the Isipingo Cemetery and historic Dick King Graveyard.
- Devaluation of properties as high density development is out of character with existing low density units.
- Increase in traffic and congestion, most notably from inadequate parking and increased public transportation.
- Increase in pedestrian traffic.

10.1 POSITIVE AND NEGATIVE IMPLICATIONS OF THE IDENTIFIED ALTERNATIVES

DO-NOTHING

 The 'do nothing' option would mean that the proposed Kanku Road residential development on Portions 4 and 7 of Erf 2363 in Isipingo will not be undertaken and the development site will remain in its present undeveloped state.

POSITIVE

 The negative impacts that may result from the proposed residential development including negative socio-economic impacts on the surrounding Isipingo Hills residents will not apply. Portion 4 of Erf 2363 Isipingo may also be retained for use as Public Open Space. The proposed development site may potentially be used for an alternative development that is more acceptable to the surrounding Isipingo Hills community.

NEGATIVE

• The 'do nothing' option would result in negative economic impacts in terms of loss of job opportunities and negative social impacts in terms of a lack of provision of housing for those currently residing in the Isipingo Transit Camp.

ALTERNATIVE DESIGN OR LAYOUTS

Housing Units

 Alternative layouts have been investigated as part of the Basic Assessment Process for the proposed Kanku Road residential development. The initially proposed layout plan included 403 semi-detached double-story units with 40m² floor space. Due to on-site space constraints, the proposed development layout was amended with the number of units decreased to 360 units, which allowed for an increased floor space of 50m² and the inclusion of a central, on-site recreational area.

POSITIVE

• The amended layout allows for a larger floor space for each unit and a central recreational area.

NEGATIVE

• The amended layout does not allow for the maximised number of units on the site.

Parking

Several alternative options for the provision of parking for the Kanku Road residential development were also investigated during the Basic Assessment Process. It was initially proposed to include an on-site parking bay for each unit on the development layout plan. However, this reduced the number of units that could be accommodated on the site to 317. The option of providing on-street parking rather than on-site parking was subsequently investigated and found to be the preferred option, with approximately 100 on-street parking bays included on the layout plan.

POSITIVE

• The amended parking layout allows for the development of 360 units as opposed to 317 units.

NEGATIVE

The amended parking layout does not provide any on-site parking.

ALTERNATIVE TECHNOLOGY

Technological alternatives in terms of sewer reticulation were investigated as part of the project. It is proposed to link the sewer reticulation for the Kanku Road development into the existing bulk Municipal system at two separate connection points. However, the existing Municipal sewer pump station at Flamboyant Road will require upgrading to accommodate the increase in sewage resulting from the proposed residential development project.

Two options for the upgrade of the Flamboyant Drive sewer pump station have been considered with option 1 being the preferred option, in which the existing sewer pump station at Flamboyant Drive be upgraded (including new rising main) and rerouted through to the Isipingo Wastewater Treatment Works.

11. EAP RECOMMENDATIONS & CONCLUSION

The EAP wishes to reiterate that the information provided in this report is true and based on factual information provided by the specialist and I&APs.

Signed: Tallum Date: 24 April 2018

ENVIRONMENTAL STATEMENT

Through conducting the Basic Assessment Process several key areas of concern have been raised by I&APs. The main area of concern is the potential negative socio-economic impacts of the proposed residential development on the existing Isipingo Hills community, particularly those that live in close proximity to the development site. Such possible negative impacts include:

- An increase in crime;
- Safety and security concerns associated with the transit camp residents embarking on protest action;
- Drug and alcohol abuse;
- Unruly behaviour;
- · Overcrowding, noise and aesthetic impacts; and
- Devaluation of properties as the high density development is out of character with existing low to medium density residential character of the area.

The specialist Socio-Economic Survey undertaken by Mabune Consulting provides the following mitigation measures, which need to be implemented to limit the negative socio-economic impacts on the surrounding Isipingo Hills community:

- The community must work with the SAPS and Metro Police to devise a safety and security strategy for the area. The community must also be encouraged to establish an active Community Policing Forum.
- Municipal bylaws in terms of noise and unruly behaviour should be implemented. The community should also report such instances to the police for action.
- The number of people per unit must be limited to the actual unit designed size. Community members should be encourage to notify the Municipality should overcrowding take place to enable the Municipality to act accordingly.
- The development architecture and finishes should take into account that of the existing area. The
 Municipality should regularly inspect the area and more specifically the development to ensure no illegal
 land use activities take place that could potentially have a negative impact on the community or their
 property values.
- The proposed development must be conducted in such a manner as not to impose undue risk or negative impacts on the quality of lives of the surrounding residential communities. Should such problems arise, the community must report the matter to the Municipality.

Another key concern that has been raised by I&APs is the loss of Public Open Space on Portion 4 of Erf 2363 and biodiversity impacts resulting from the clearing of vegetation and associated loss of faunal habitat on the development site.

The findings of the specialist Biodiversity Assessment show the site to be dominated by alien vegetation with no species of conservation significance present on the site. The site therefore has low biodiversity value. Without links and corridors to more suitable habitats the site has no real conservation value and if developed, would not detrimentally affect any fauna needing protection.

In addition to the above, clearing the site of the alien vegetation for the proposed development will be beneficial in that it will prevent the further spread of this vegetation to surrounding areas. The following mitigation measures are proposed to try and enhance biodiversity with the proposed development:

- Only locally indigenous or endemic plant species must be used for landscaping within the residential development and surrounds.
- An alien vegetation control programme must be implemented at the site prior to the commencement of construction and must be ongoing throughout the construction and operational phases, for the lifetime of the development.

An increase in traffic and congestion, most notably from inadequate parking and increased public transportation as well as an increase in pedestrian traffic has been raised as a key negative impact associated with the proposed development. The findings of the specialist Traffic Impact Assessment undertaken by BIS Consulting show that there is currently capacity available within the surrounding road network to accommodate the added trips generated by the proposed development. There are no external roads and / or intersection upgrades required as a result of this proposed development.

Given the landuse and demographics of the target market for the development, it is assumed that most of the residents will be pedestrians and the development will be sustained predominantly by public transport. As such, a parking rate of 1 bay per 5 units was deemed sufficient for the development.

The Traffic Impact Assessment (Appendix L) contains recommendations and mitigation measures to ensure that the development's access and internal roads and parking bays are sufficiently sized to prevent any negative traffic and congestion related impacts.

Another key concern raised is that the existing service infrastructure and facilities in the area are not adequate to accommodate the proposed development. Based on the findings of the Civil Design Study undertaken by Map Africa Consulting Engineers, an upgrade of the existing sewer and electricity infrastructure in the area is required to accommodate the proposed development. In addition, a site specific stormwater management plan will be implemented for the site.

Lastly, the impact of the proposed development on the Isipingo Cemetery, which is located adjacent to the development site and the historic Dick King Graveyard, which is located approximately 90m from the site, has been raised by I&APs. Concerns relate to the damage and destruction of the graves through vandalism as well as loss of access to the Isipingo Cemetery.

The specialist Heritage Impact assessment undertaken by Active Heritage cc has provided the following mitigation measures:

- A buffer of at least 30m must be maintained around the Isipingo Cemetery.
- A sturdy fence must be erected between the Isipingo Cemetery and the proposed development area before any construction work commences.

Taking the above into consideration, and provided the recommendations provided in this report, and the contents of the EMPr are strictly adhered to, the EAP is of the opinion that the proposed activity should be authorised. The EAP recommends that the following activities are made conditions of the Environmental Authorisation:

SAFETY

• The approved EMPr must be strictly enforced. During the construction phase, the activities should be monitored monthly by an independent Environmental Control Officer (ECO).

CONSTRUCTION

- Local businesses and unemployed people in the immediate area must be considered first, before employing services from further afield.
- Noise and dust impacts must be controlled.

- · Visual impacts must mitigated against.
- Vehicles accessing the properties must be driven cautiously within the required speed limits.
- It is recommended that activities of construction vehicles, building contractors and labourers should be limited to working hours between 7am and 5pm during weekdays. Furthermore, construction on weekends and public holidays should not be permitted.
- Machinery and equipment must be maintained and regularly serviced to ensure that unnecessary noise is prevented. Workers on site must not create unnecessary noise such as hooting or shouting.
- All construction labourers must remain within the boundaries of the construction site at all times.
- All nearby, undisturbed slopes must be protected from erosion by demarcating the construction site. No vehicular or pedestrian access should be allowed beyond the demarcated area.
- Erosion control measures must be implemented on destabilised slopes.
- Steep slopes must be stabilised by hard structures, preferably with a natural look and that allow plant growth.
- All trenches must be backfilled as soon as possible.
- Re-vegetation of exposed soil should take place as soon as possible.
- Measures should be taken to cover exposed areas during high intensity rainfall events. Stockpiled topsoil should be dampened or covered during times of high wind to prevent dust.
- The subsoil stockpiles must be positioned on the higher side of a disturbed area, and above the 1:20 year flood line, wherever possible.
- Rehabilitation and landscaping should take place in the wetter summer months to increase the newly
 planted vegetations' chance of becoming established.
- Construction should be done during the winter months.
- Construction areas should only be cleared of vegetation immediately prior to the commencement of construction, in order to reduce the period which soils are exposed.
- The construction of the Kanku Road residential development must be in accordance to the approved design and layout specifications.
- All construction and operational activities must adhere to the EMPr.
- A suitably trained engineer must assess the stability of existing old buildings in close proximity to the site, and confirm whether the use of heavy equipment during construction will likely lead to deterioration of the old buildings. If a risk is identified, alternative equipment must be use.

SOCIO-ECONOMIC

- The SAPS and Metro Police must be engaged to devise a safety and security strategy for the area.
- The community must be encouraged to establish an active Community Policing Forum.
- The development architecture and finishes must take into account that of the existing area.
- The Municipality must regularly inspect the area and more specifically the development to ensure no illegal land use activities take place that could potentially have a negative impact on the community or their property values.
- Prior to project implementation the recommendations contained in the specialist Traffic Impact Assessment must be implemented.
- Commitment from the City needs to be in place to ensure the infrastructure within the area can sustain the additional units and funding must be made available for any upgrade needed to existing infrastructure prior to construction of the developments.
- The number of people per unit must be limited to the actual unit designed size. Community members
 must be encourage to notify the Municipality should overcrowding take place to enable the Municipality
 to act accordingly.
- Municipal bylaws in terms of noise and unruly behaviour must be implemented. The community must also report such instances to the police for action.

HERITAGE

- A buffer of at least 30m must be maintained around the Isipingo Cemetery.
- A sturdy fence must be erected between the Isipingo Cemetery and the proposed development area before any construction work commences.
- In the unlikely event that the development expose any graves on the footprint it is imperative that all construction cease and the local heritage agency Amafa or a heritage consultant be contacted for further evaluation.
- Attention is drawn to the National Heritage Resources Act, 1999 (Act No. 25 of 1999) which, requires
 that operations that expose archaeological or historical remains as well as graves should cease
 immediately, pending evaluation by the provincial heritage resources authority.

GROUND AND SURFACE WATER

- It is imperative that site drainage and landscaping is implemented in all areas to prevent surface ponding.
- The Stormwater Management Plan complied by Gendu Consulting must be implemented.

FAUNA AND FLORA

- All alien vegetation on the site must be removed.
- The alien vegetation management programme contained within the EMPr (Appendix M), must be implemented for both the construction and operational phases.
- Only locally indigenous plant species must be used for landscaping around the proposed residential development.

TRAFFIC

- The development access off Kanku Road must be between 6m and 9m in width which should allow for adequate movements into and out of the site.
- All internal roads must be a minimum of 5.5m in width to allow for adequate internal movements.
- With regards to the design of the parking layout, the following requirements must be taken into account:
 - All vehicles are to enter and exit the site in forward gear.
 - The Development Layout must make sufficient provision for the turning movements of all vehicles within the site boundaries.
 - All parking facilities, accesses and driveways to be designed and dimensioned in accordance with the schedule of guidelines for off street parking.
- All driveway ramps are to have a maximum gradient of 15% with a minimum 30m vertical curve radius.
- Warning signage must be erected to warn motorists of slow-moving vehicles during the construction phase.

BIOPHYSICAL

- The activity(s) must be restricted to the approved development footprint and all required buffers must be implemented and maintained.
- Vegetation clearing activities should take place only immediately prior to the commencement of construction activities in order to minimise the time the soil is bare, thus minimising soil erosion, dust and visual impacts.
- · Land clearing activities must not be undertaken during windy conditions in order to minimise dust.

12. APPENDICES