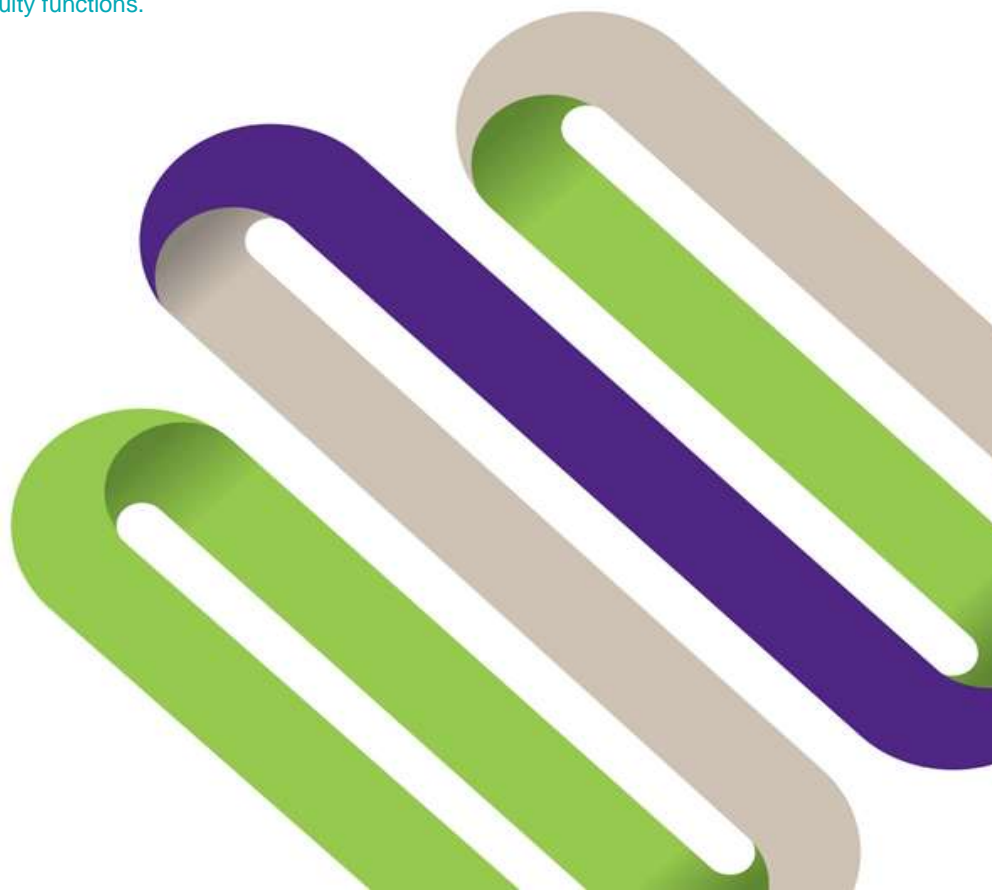


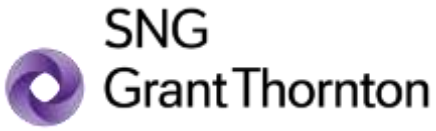
# Vuthela iLembe LED Programme (VIP)



## Assesment Report of iLembe District Disaster Management Centre, located in KwaDukuza

NAME OF PROJECT:	Audit and risk management – feasibility study, system review and training of internal auditors and risk managers Internal Audit Review
PROJECT NUMBER:	VILP/I/028
NAME OF ENTITY:	iLembe District Municipality
ITEM COVERED:	Comprehensive Assessment Report of iLembe District Municipality Disaster Management Centre to accommodate district wide shared Business Continuity functions.
ITEM NUMBER:	6.1





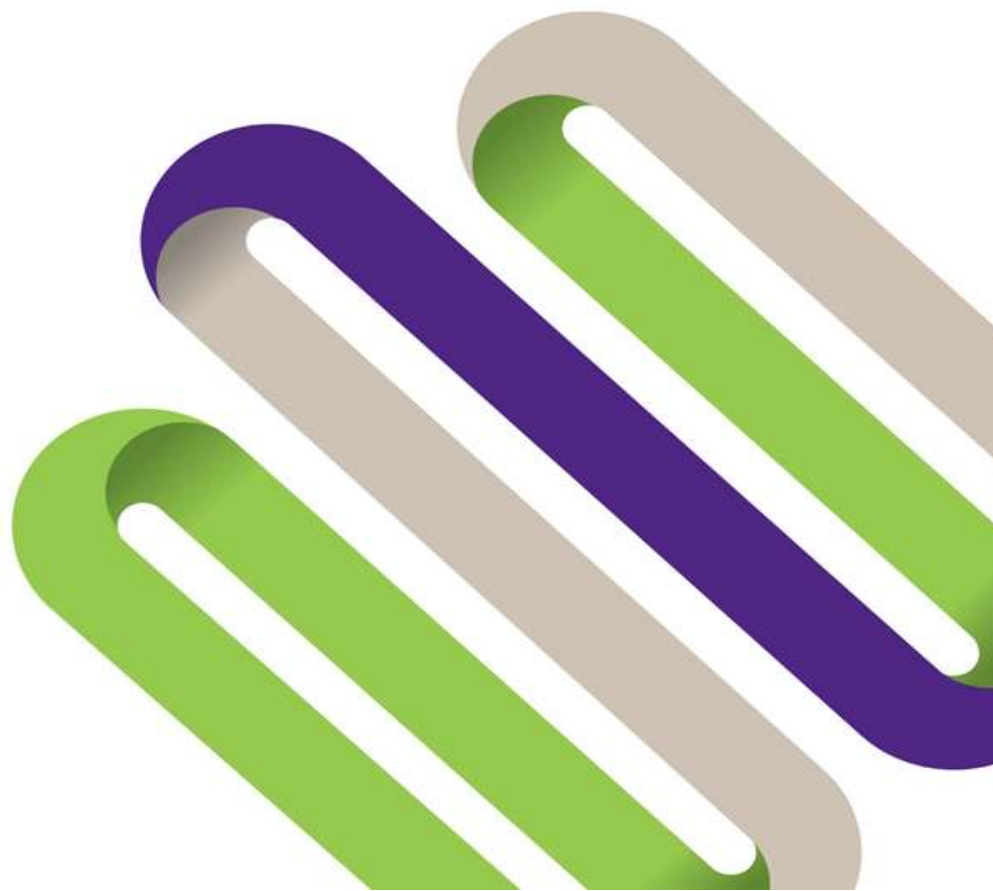
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Nonkanyiso Gutshwa	KwaDukuza Municipality	✓		
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<b>Purpose of the project:</b>	
<b>Provide a high-level assessment of the iLembe District Disaster Management Centre</b>	

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## GLOSSARY OF TERMS

Abbreviation	Term	Description
BCM	Business Continuity Management	<p><b>The capability of the organisation to continue delivery of products or services at acceptable predefined levels following disruptive incident. (International Standards Organisation:22301)</b></p> <p><b>The key discipline that sits at the heart of building and improving resilience of organisations. (GPG:2018)</b></p>
BCP	Business Continuity Plan	<b>The document that defines the resources, actions, tasks, and data required to manage the business recovery process in the event of a business disruption.</b>
DMC	Disaster Management Centre	<b>A functional centre that can be utilized to coordinate and manage any localised or Provincial Disaster, in line with the Disaster Management Act 57, of 2002.</b>

## SECTION 1: INTRODUCTION

### 1.1. Background

We are pleased to submit this high-level assessment report on the iLembe District Disaster Management Centre in KwaDukuza for consideration. This document forms part of all the stages within the Business Continuity Management lifecycle more especially the Analysis and Design stages.

### 1.2. Purpose of a Disaster Management Centre

Whilst the main purpose of a Disaster Management Centre needs to be clearly defined, it can be considered to provide for an alternate location during a crisis or incident affecting one or more Municipalities. This will allow those already identified key / critical resources, especially from a Crisis Management aspect to be able to follow a coordinated approach to any disaster effecting the District. The Disaster Management Centre could also serve as central point in order to assess any potential risks, or vulnerability to Communities, mitigating disaster severity, ensuring emergency preparedness, promoting rapid and effective response, ensuring the provision of relief, and implementing necessary actions in line with applicable legislation. (Such as the Disaster Management Act 57 of, 2002).

In addition, a Disaster Management Centre could be considered to be utilised as an alternative work area recovery site, in the event that one of the local Municipalities needed to relocate key resources in order to continue operations following an incident or disruption at their main location. However, the resources would need to have their laptops preset to be able to automatically login to the wireless network and be able to access their relevant servers.

### 1.3. Approach to this Assessment

Our approach was to carry out a physical site visit and to understand the facilities available, hardware and software compatibility, internal testing process of site reediness, site availability to accommodate all Municipalities, especially during a crisis. In addition, online meetings were held with the Stakeholders, especially from an ICT perspective. We also took in to consideration the travelling distance between the various municipalities.



#### 1.4. Scope Limitations

Conclusions could not be made on the hardware and software due to not being able to have sight of the district wide ICT plan to understand planned future IT initiatives for the district and whether these would better position the DMC building to be used as a business continuity site. There was no Wifi in the building for testing and there were no hardware and software equipment in the building that could be tested.

Although we understood that there was phase II plans for the DMC, we did not have sight of these plans to understand the planned improvements to the building.

## SECTION 2: SITE LOCATION

The disaster management centre is situated in KwaZulu-Natal, KwaDukuza (Stanger), and close to R102. The exact location is shown in diagram 1 below. This area falls within the floodplain shaded in blue in diagram 2. Although we were informed that the necessary precautions were taken into consideration when erecting the building in this area to mitigate against the risk of flooding, it is important that this risk is evaluated again to confirm that the building will be accessible if flooding occurs. Diagram 3 shows an aerial view of the parking area. Diagram 4 shows the location of the DMC in relation to the 4 local municipalities.

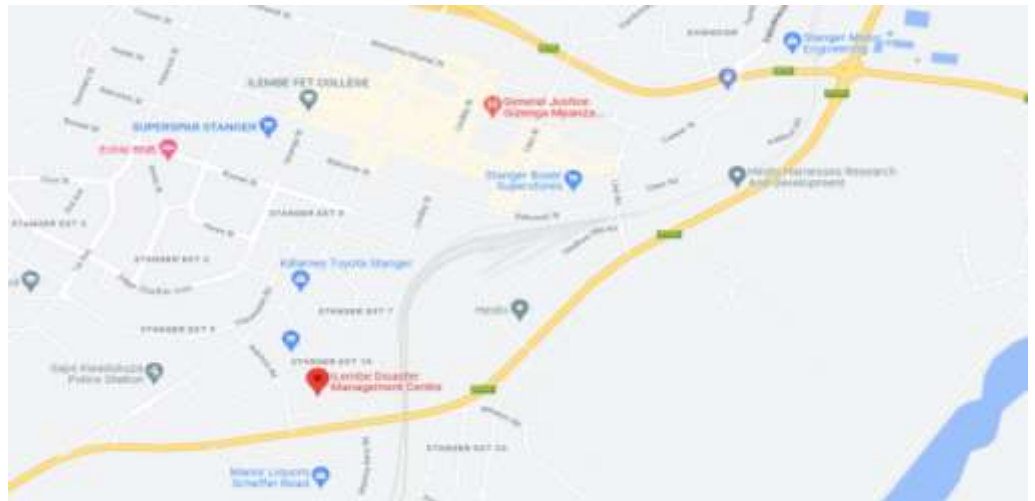


Diagram 1: KwaDukuza Street map

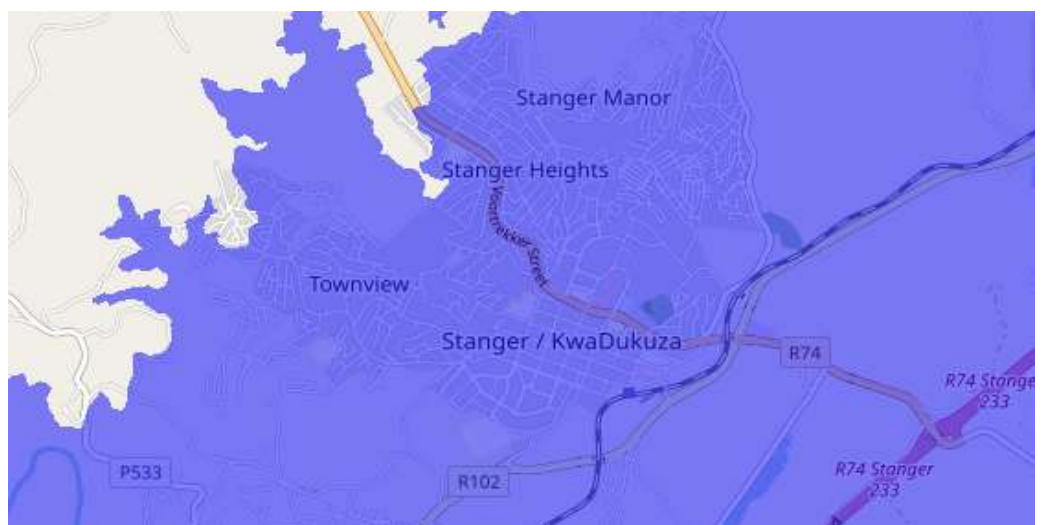


Diagram 2: Site Map and Google Earth view - Floodplain (shaded in purple) - iLembe Disaster Management Centre (red star)



Diagram 3: iLembe Disaster Management Centre, Auditorium, Municipality outbuildings and informal parking area



Diagram 4: Local Municipalities within iLembe District in relation to the DMC in KwaDukuza (Stanger)

## **SECTION 3: SUMMARY OF THE KEY OBSERVATIONS AND POTENTIAL RISKS**

Our observations are summarised below based on the information provided and researched, as follows:

3.1 As it can be seen from the site and google earth map in Section 1.4, the Disaster Management Centre is located on a known floodplain. This could present a serious issue and prevent access, especially taking in to account the flooding from heavy rains this year.

3.2 The travelling distance between Mandeni, Maphumulo, and Ndwedwe to the Disaster Management Centre in KwaDukuza ranges between 36km and 53km. The accepted practice, depending on accessibility and road conditions is usually within the 50km range. In addition, one must also take in to consideration the Recovery Time Objective (RTO), as that will dictate if key resources need to remote work from home, especially those critical process activities that have an RTO of <1 hour.

3.3 Should the Disaster Management Centre be considered as an alternative work area recovery site, requirements for a stable and uninterrupted power supply would be required and tested regularly. In addition, sufficient WiFi bandwidth to accommodate staffing, and necessary systems / application accessed without restrictions. This would also require regular testing and monitoring.

3.4 The Disaster Management Centre (DMC) as can be seen in photo under section 1 is a purpose built two story single property. Access is gained via an open area on the ground floor which is serviced by a single staircase. On the upper floor, there is an open plan conference / meeting area, board room, and several offices. This could accommodate between 20 to 30 resources, excluding the lockable offices. There is no other access to the property nor a lift, which would disadvantage any staff with disabilities that would be called upon during a crisis. In addition, we also noticed that there was no emergency exit, and with reliance on a single staircase, this could present a serious issue, should a fire break out near the exit point.

3.5 The open area on the ground floor does lend itself for further expansion, assuming the possible risk of flooding is fully addressed. We also understand that there is a possibility of a phase 2 of the DMC, which could see further expansion in the future. There are two photos at the end of section 1.4 reflecting the open area in front of the

DMC which would need to be improved upon in order to accommodate additional parking. The following diagrams illustrate the points discussed above.

#### 1.4.3 Disaster Management Centre



Diagram 5: External view of the DMC from the carpark and the unused open ground floor space within the DMC, which lends itself to office space conversion. This is also the only access and exit point to the building.



Diagram 6: Open plan boardroom that lends itself ideally for a Command Centre or WAR room. Sufficient seating for 25 to 30 resources and although there is wireless network connectivity, the capacity is unknown.



Diagram 7: Side view of the open plan boardroom, so additional power points will be needed to be installed in order to accommodate multiple users.



Diagram 8: External view of the original Disaster Management Centre, that is now used as an Auditorium venue and the informal parking area.



Diagram 9: External carpark and ancillary municipal buildings and vehicles.

## **SECTION 4: CONCLUSION and RECOMMENDATIONS**

The DMC has possibilities to be used either as a Disaster Centre, or a Command Location during a Crisis or Incident, as well as an alternative work area recovery site. However, as mentioned above, there are certain limitations that would need to be addressed first, more especially the parking, access / exit (especially the no fire escape), staff with disabilities, alternative electricity generation and verification of wireless connectivity capacity, as well as a failover solution as a backup.

The District Municipality needs to formalise a decision on the use of the DMC building which needs to be aligned with the purpose, more especially taking in to account the proposed phase II work.

With the past damage and destruction last year caused by the storms and huge volume of rains, perhaps external funding could be obtained to help towards the upgrading of the DMC in order to create a state-of-the-art Disaster Management and Work Area Recover Centre.



## **SECTION 5: PROPOSED WAY FORWARD**

There is a need to develop a clear road map with an in-depth feasibility study involving all the key stakeholders and interested parties, in which the following would need to be considered:

- Formalise the agreed purpose of the DMC and align with District wide strategies.
- Review ICT capability at the DMC more especially in terms of capacity and internet security.
- Consider ICT access to all local municipality servers and requirements and see if cloud hosting is not a better and more cost-effective option.
- Civil Engineering to review drainage capabilities more especially around the access point and existing carpark, together with the adjacent municipal buildings.
- Installation of an external fire escape staircase, and that all Health & Safety protocols and requirements are considered.
- Review the current back-up generating capacity supporting the DMC and that it is sufficient, that the generator is in a working standby condition, with service plan and fuel supply reserves.
- Consider alternative power generation using solar, battery storage and inverter.
- Review seating capacity, more especially if one or more municipality is facing a crisis.
- Consider creating work area on the ground floor open area, thus increasing the seating capacity and to cater for any staffing disabilities.
- Upgrade the carpark area and improve on the security of the site.
- Prepare business plans to apply for external funding towards the upgrading of the DMC in order to create a state-of-the-art Disaster Management and Work Area Recover Centre.

