

EXISTING  
REFER TO DRAWING NUMBER:  
31120058-EC-00-0000-01-B

NEW BUCKET / TIER  
IN MDB2 BUILDING

AT THE LANDFILL SITE (OPTION 1)

- LEGEND**
- BUSBAR
  - SINGLE POLE
  - DOUBLE POLE OR SINGLE POLE AND NEUTRAL
  - TRIPLE POLE
  - CIRCUIT BREAKER  
MCCB : MOULDED CASE CIRCUIT BREAKER  
ACB : AIR CIRCUIT BREAKER
  - FUSE
  - NUMBER OF CORES
  - CABLE SIZE (sq mm)
  - EARTH CONDUCTOR SIZE (sq mm)
  - AMMETER : INSTANTANEOUS  
MD = MAXIMUM DEMAND
  - VOLTMETER
  - CURRENT TRANSFORMER
  - SURGE ARRESTOR
  - POWER METER
  - 11kV OVERHEAD LINE

**NOTES**

1. NEW TIER TO BE JOINED TO EXISTING BUSBAR BY MEANS OF COPPER BUSBAR LINKS.
2. INSTALLATION TO COMPLY WITH THE NATIONAL ENERGY REGULATION OF SOUTH AFRICA (NERSA) AND THE SOUTH AFRICAN NATIONAL STANDARDS (SANS). SPECIFICALLY BUT NOT LIMITED TO THE "NRS 097-2-1:2010" AND "GRID CONNECTION CODE FOR RPP'S IN SOUTH AFRICA - VERSION 2.9" WHERE THIS PROJECT SHALL FALL UNDER A CATEGORY B INSTALLATION (1MVA TO 20MVA).

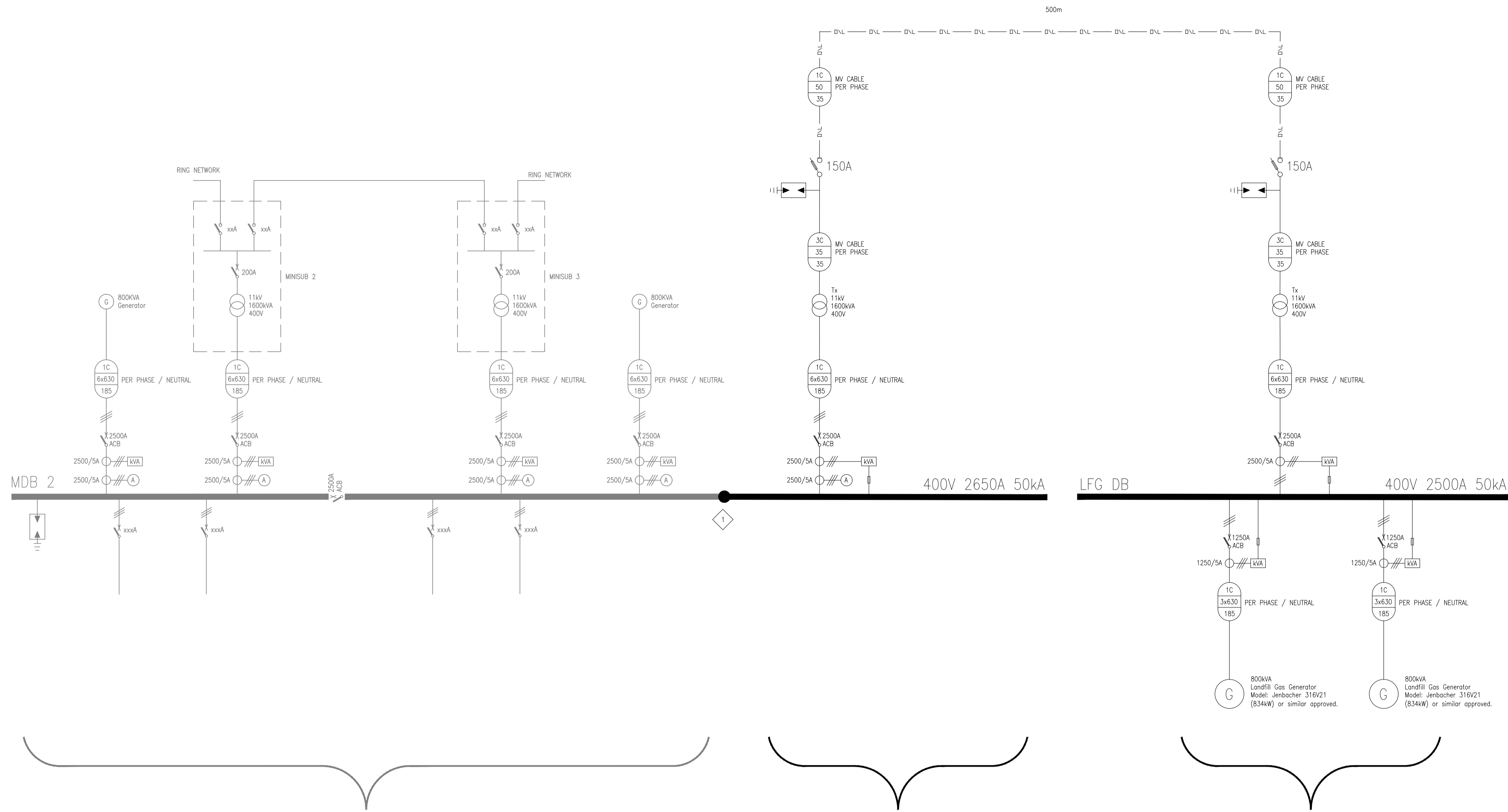
DESIGNED	C. MOULT			
DRAWN	C. MOULT			
CHECKED	A. BRAND			
APPROVED				
PROJ. PRINCIPAL:.....				
SIGNATURE:..... DATE:.....				
REV	DESCRIPTION	DATE	REV BY	CHKD
A	ISSUED FOR COMMENT	18/05/17	CMO	ABB
REVISIONS				

DESIGNED	C. MOULT
DRAWN	C. MOULT
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PROJ. PRINCIPAL:.....	
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**Royal HaskoningDHV**  
*Enhancing Society Together*

PO Box 5195 Tyger Valley 7536  
 Tel: (021) 9367600  
 Fax: (021) 9367611  
 Email: capetown@rhdhv.com

<b>TITLE</b> LANDFILL GAS (LFG) EXTRACTION FOR ENERGY GENERATION (OPTION 1) STELLENBOSCH WWTW MCC MDB2 & LFG DB SINGLE LINE DIAGRAM					
<b>CLIENT</b>  STELLENBOSCH STELLENBOSCH • FRIL • FRANSCHHOEK MUNICIPALITY • UMASIPALA • MUNISIPALITEIT	<b>PROJECT No.</b> MD2974	<b>CONTRACT No.</b> XXXX	<b>SCALE</b> N.T.S.	<b>DRAWING No.</b> MD2974-E-001	<b>REV</b> 



EXISTING  
REFER TO DRAWING NUMBER:  
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NEW BUCKET / TIER  
IN MDB2 BUILDING

AT THE LANDFILL SITE (OPTION 2)

**LEGEND**

	BUSBAR
	SINGLE POLE
	DOUBLE POLE OR SINGLE POLE AND NEUTRAL
	TRIPLE POLE
	CIRCUIT BREAKER MCCB : MOULDED CASE CIRCUIT BREAKER ACB : AIR CIRCUIT BREAKER
	FUSE
	NUMBER OF CORES CABLE SIZE (sq mm) EARTH CONDUCTOR SIZE (sq mm)
	AMMETER : INSTANTANEOUS MD = MAXIMUM DEMAND
	VOLTMETER
	CURRENT TRANSFORMER
	SURGE ARRESTOR
	POWER METER
	11kV OVERHEAD LINE

**NOTES**

1. NEW TIER TO BE JOINED TO EXISTING BUSBAR BY MEANS OF COPPER BUSBAR LINKS.
2. INSTALLATION TO COMPLY WITH THE NATIONAL ENERGY REGULATION OF SOUTH AFRICA (NERSA) AND THE SOUTH AFRICAN NATIONAL STANDARDS (SANS). SPECIFICALLY BUT NOT LIMITED TO THE "NRS 097-2-1:2010" AND "GRID CONNECTION CODE FOR RPP'S IN SOUTH AFRICA - VERSION 2.9" WHERE THIS PROJECT SHALL FALL UNDER A CATEGORY B INSTALLATION (1MVA TO 20MVA).

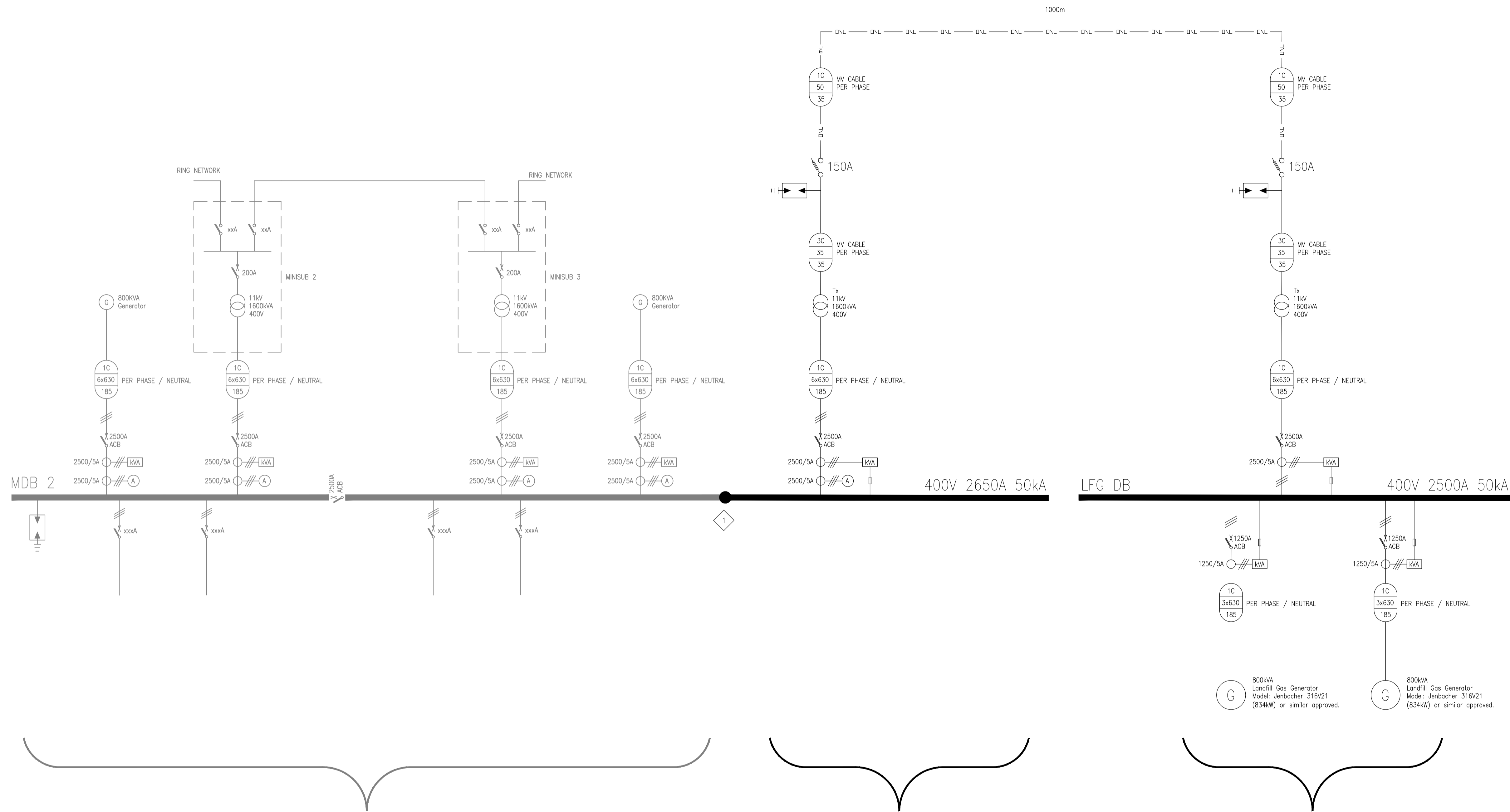
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CHECKED	A. BRAND			
APPROVED				
PROJ. PRINCIPAL:.....				
SIGNATURE:..... DATE:.....				
ISSUED FOR COMMENT	18/05/17	CMO	ABB	
REVISIONS				

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DRAWN	C. MOULT
CHECKED	A. BRAND
APPROVED	
PROJ. PRINCIPAL:.....	
SIGNATURE:..... DATE:.....	

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TITLE LANDFILL GAS (LFG) EXTRACTION FOR ENERGY GENERATION (OPTION 2) STELLENBOSCH WWTW MCC MDB2 & LFG DB SINGLE LINE DIAGRAM				
CLIENT 	PROJECT No. MD2974	CONTRACT No. XXXX	SCALE N.T.S.	DRAWING No. MD2974-E-002
				REV 



EXISTING  
REFER TO DRAWING NUMBER:  
31120058-EC-00-0000-01-B

NEW BUCKET / TIER  
IN MDB2 BUILDING

AT THE LANDFILL SITE (OPTION 3a)

LEGEND	
	BUSBAR
	SINGLE POLE
	DOUBLE POLE OR SINGLE POLE AND NEUTRAL
	TRIPLE POLE
	CIRCUIT BREAKER MCCB : MOULDED CASE CIRCUIT BREAKER ACB : AIR CIRCUIT BREAKER
	FUSE
	NUMBER OF CORES CABLE SIZE (sq mm) EARTH CONDUCTOR SIZE (sq mm)
	AMMETER : INSTANTANEOUS MD = MAXIMUM DEMAND
	VOLTMETER
	CURRENT TRANSFORMER
	SURGE ARRESTOR
	POWER METER
	11kV OVERHEAD LINE

NOTES

1. NEW TIER TO BE JOINED TO EXISTING BUSBAR BY MEANS OF COPPER BUSBAR LINKS.
2. INSTALLATION TO COMPLY WITH THE NATIONAL ENERGY REGULATION OF SOUTH AFRICA (NERSA) AND THE SOUTH AFRICAN NATIONAL STANDARDS (SANS). SPECIFICALLY BUT NOT LIMITED TO THE "NRS 097-2-1:2010" AND "GRID CONNECTION CODE FOR RPP'S IN SOUTH AFRICA - VERSION 2.9" WHERE THIS PROJECT SHALL FALL UNDER A CATEGORY B INSTALLATION (1MVA TO 20MVA).

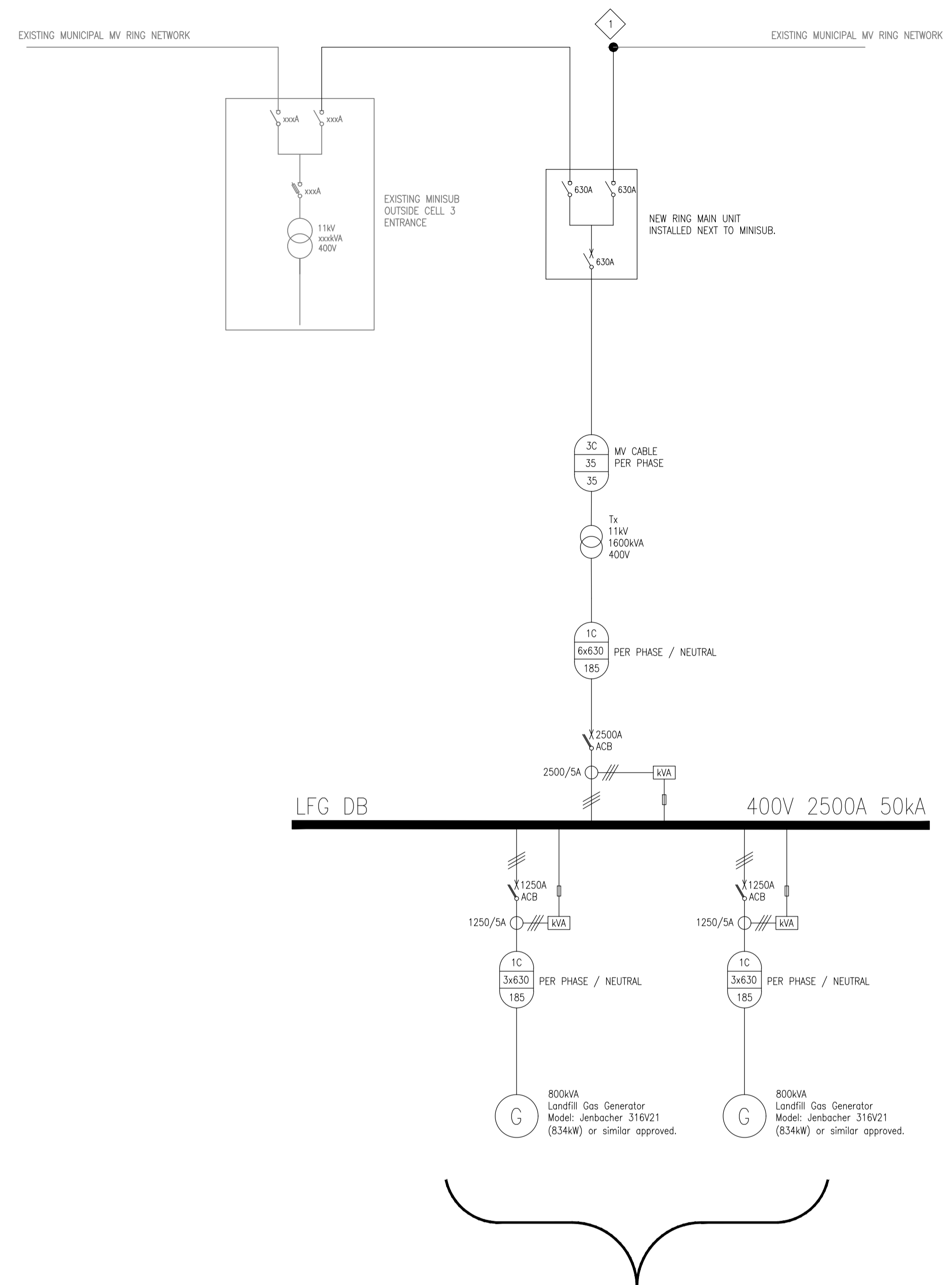
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REVISIONS				

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CHECKED	A. BRAND
APPROVED	
PROJ. PRINCIPAL:	.....
SIGNATURE:	..... DATE:.....

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TITLE				
<b>LANDFILL GAS (LFG) EXTRACTION FOR ENERGY GENERATION (OPTION 3a)</b> STELLENBOSCH WWTW MCC MDB2 & LFG DB SINGLE LINE DIAGRAM				
CLIENT	PROJECT No.	CONTRACT No.	SCALE	DRAWING No.
 STELLENBOSCH STELLENBOSCH • TULLE • FRANSSHOOR MUNICIPALITY • UMASIPALA • MUNISIPALITEIT	MD2974	XXXX	N.T.S.	MD2974-E-003
				REV
				A



AT THE LANDFILL SITE (OPTION 3b)

LEGEND

- BUSBAR
- SINGLE POLE
- DOUBLE POLE OR SINGLE POLE AND NEUTRAL
- TRIPLE POLE
- CIRCUIT BREAKER  
MCCB : MOULDED CASE CIRCUIT BREAKER  
ACB : AIR CIRCUIT BREAKER
- FUSE
- NUMBER OF CORES  
CABLE SIZE (sq mm)  
EARTH CONDUCTOR SIZE (sq mm)
- AMMETER : INSTANTANEOUS  
MD = MAXIMUM DEMAND
- VOLTMETER
- CURRENT TRANSFORMER
- SURGE ARRESTOR
- POWER METER
- 11kV OVERHEAD LINE

NOTES

1. MUNICIPAL MV LINE CURRENTLY TERMINATING AT MINISUB, LINE TO BE EXTENDED TO THE RMU.
2. INSTALLATION TO COMPLY WITH THE NATIONAL ENERGY REGULATION OF SOUTH AFRICA (NERSA) AND THE SOUTH AFRICAN NATIONAL STANDARDS (SANS). SPECIFICALLY BUT NOT LIMITED TO THE "NRS 097-2-1:2010" AND "GRID CONNECTION CODE FOR RPP'S IN SOUTH AFRICA - VERSION 2.9" WHERE THIS PROJECT SHALL FALL UNDER A CATEGORY B INSTALLATION (1MVA TO 20MVA).

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TITLE <b>LANDFILL GAS (LFG) EXTRACTION FOR ENERGY GENERATION (OPTION 3b)</b> STELLENBOSCH LFG DB SINGLE LINE DIAGRAM				
CLIENT	PROJECT No.	CONTRACT No.	SCALE	DRAWING No.
 STELLENBOSCH STELLENBOSCH • TULLE • FRANSCHHOEK MUNICIPALITY • UMASIPALA • MUNISIPALITEIT	MD2974	XXXX	N.T.S.	MD2974-E-004
				REV A