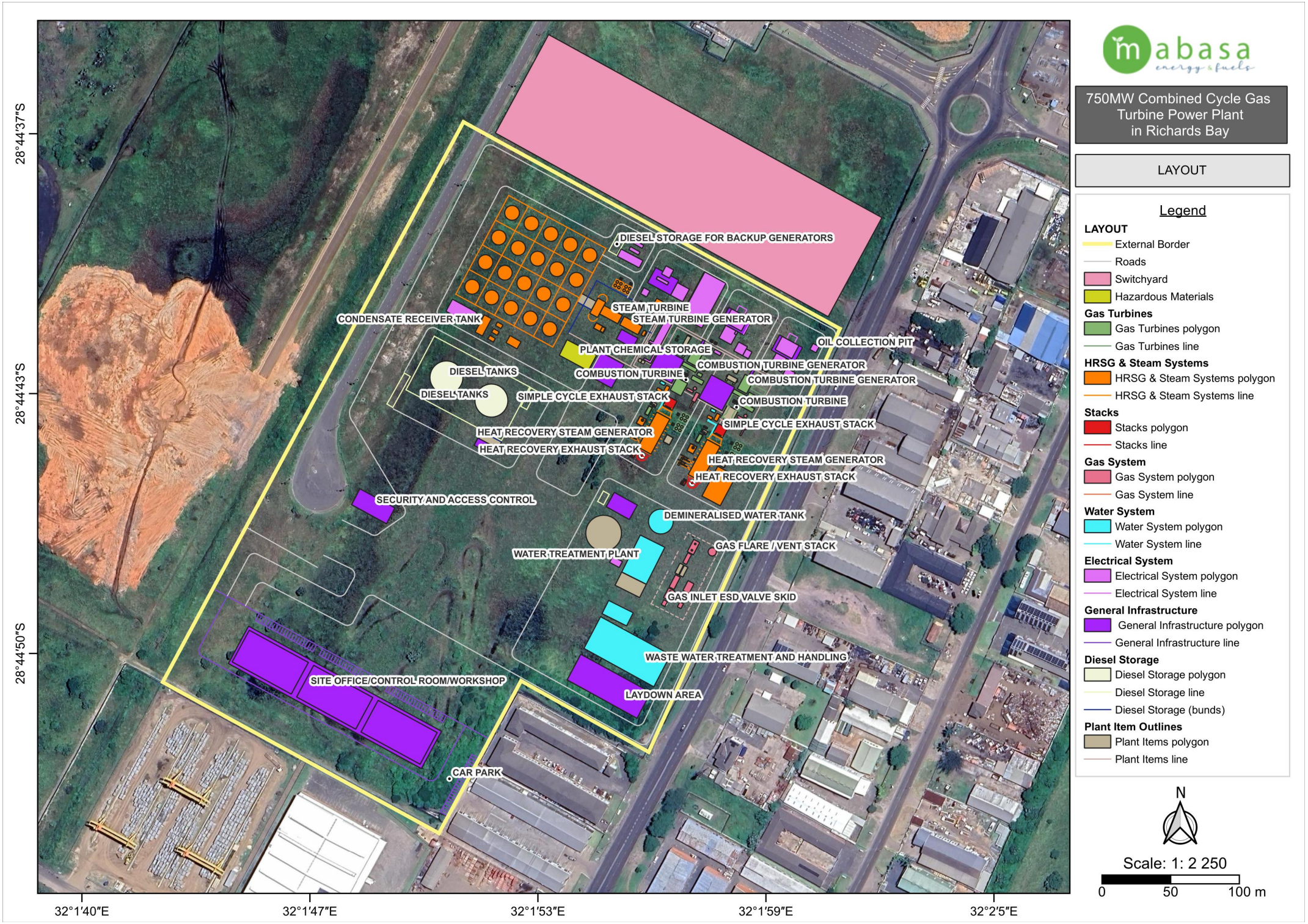
APPENDIX A

MAPS & TECHNICAL DRAWINGS


mabasa energy & fuels
750MW Combined Cycle Gas Turbine Power Plant in Richards Bay
LAYOUT
Legend
LAYOUT
External Border
Roads
Switchyard
Hazardous Materials
Gas Turbines
Gas Turbines polygon
Gas Turbines line
HRSG & Steam Systems
HRSG & Steam Systems polygon
HRSG & Steam Systems line
Stacks
Stacks polygon
Stacks line
Gas System
Gas System polygon
Gas System line
Water System
Water System polygon
Water System line
Electrical System
Electrical System polygon
Electrical System line
General Infrastructure
General Infrastructure polygon
General Infrastructure line
Diesel Storage
Diesel Storage polygon
Diesel Storage line
Diesel Storage (bunds)
Plant Item Outlines
Plant Items polygon
Plant Items line
DIESEL STORAGE FOR BACKUP GENERATORS
CONDENSATE RECEIVER TANK
STEAM TURBINE
STEAM TURBINE GENERATOR
OIL COLLECTION PIT
PLANT CHEMICAL STORAGE
COMBUSTION TURBINE GENERATOR
DIESEL TANKS
COMBUSTION TURBINE
COMBUSTION TURBINE GENERATOR
DIESEL TANKS
SIMPLE CYCLE EXHAUST STACK
COMBUSTION TURBINE
SIMPLE CYCLE EXHAUST STACK
HEAT RECOVERY STEAM GENERATOR
HEAT RECOVERY EXHAUST STACK
HEAT RECOVERY STEAM GENERATOR
HEAT RECOVERY EXHAUST STACK
SECURITY AND ACCESS CONTROL
DEMINERALISED WATER TANK
WATER TREATMENT PLANT
GAS FLARE / VENT STACK
GAS INLET ESD VALVE SKID
WASTE WATER TREATMENT AND HANDLING
SITE OFFICE/CONTROL ROOM/WORKSHOP
LAYDOWN AREA
CAR PARK
N
Scale: 1: 2 250
0
50
100 m
28°44'37"S
28°44'43"S
28°44'50"S
32°1'40"E
32°1'47"E
32°1'53"E
32°1'59"E
32°2'5"E



LEGEND

1	COMBUSTION TURBINE	51	DEMIN PLANT CHEMICAL STORAGE
2	COMBUSTION TURBINE GENERATOR	52	CYCLE CHEMICAL FEED EQUIPMENT
3	COMBUSTION TURBINE ROTOR REMOVAL	53	BOILER FEED PUMPS
4	COMBUSTION TURBINE ACCESSORY MODULE	54	STEAM TURBINE BLOW-DOWN TANK
5	DIESEL STORAGE FOR BACKUP GENERATORS	55	CAR PARK
6	COMBUSTION TURBINE PACKAGE ELECTRONIC CONTROL COMMP.	56	CLOSED CYCLE COOLING WATER PUMPS
7	GT AIR INLET	57	STEAM TURBINE ELECTRO HYDRAULIC CONTROL UNIT
8	STATIC STARTER SYSTEM	58	STEAM TURBINE SEAL OIL CONTROL UNIT
9	STATIC EXCITATION SYSTEM	59	STEAM TURBINE STATOR CONTROL UNIT
10	COMBUSTION TURBINE GENERATOR BREAKER	60	
11	HRGS RETICULATION PUMPS	61	SAMPLE PANEL ENCLOUSER
12	COMBUSTION TURBINE AC LINE REACTOR	62	
13	COMBUSTION TURBINE DC LINE REACTOR	63	EVAPORATIVE COOLING PUMP
14	HRSG BLOWDOWN STRUCTURE	64	CARBON DIOXIDE STORAGE
15	GT HYDROGEN GENERATOR ACCESSORIES SKID	65	NITROGEN STORAGE
16	COMBUSTION TURBINE GENERATOR STEP-UP TRANSFORMER	66	COMBUSTION TURBINE EXCITATION TRANSFORMER
		67	COMBUSTION TURBINE ISOLATION TRANSFORMER
17	FIRE WALL	68	COMBUSTION TURBINE UNIT AUXILIARY TRANSFORMER
18	CONTAINMENT CURB		
19	COMBUSTION TURBINE FIRE PROTECTION CO2 SKID	69	RESERVE AUXILIARY TRANSFORMER
20	COMBUSTION TURBINE WASH WATER DRAIN TANK (BELOW GRADE)	70	SITE OFFICE/CONTROL ROOM/WORKSHOP
21	GT HYDROGEN SEAL OIL SKID	71	WATER TREATMENT PLANT ELECTRICAL BUILDING
22	HEAT RECOVERY STEAM GENERATOR	72	FF FOAM MIXING STATION (SFFF)
23	HEAT RECOVERY EXHAUST STACK	73	FIRE PROTECTION VALVE AREA
24	CONTINUOUS EMISSIONS MONITORING ENCLOSURE	74	STEAM TURBINE EX2100 COMPARTMENT
25	FUEL GAS PERFORMANCE HEATER	75	STEAM TURBINE EXCITATION TRANSFORMER
26	FUEL GAS FILTER / SEPARATOR	76	COMBUSTION TURBINE LS2100 COMPARTMENT
27	FUEL GAS DRAINS TANK	77	ACC ELECTRICAL BUILDING
28	HRGS BLOW-DOWN	78	
29	PLANT CHEMICAL STORAGE	79	
30	OIL COLLECTION PIT	80	SECURITY AND ACCESS CONTROL
31	COMBUSTION TURBINE MAINTENANCE AREA	81	SIMPLE CYCLE EXHAUST STACK
32	FIRE FIGHTING PUMP HOUSE DIESEL STORAGE	82	SIMPLE CYCLE EXHAUST STACK
33	ST HYDROGEN GENERATOR ACCESSORIES SKID	83	DRAINAGE TRENCH
34	HRSG HOT DRAINS SUMP	84	ELECTRICAL SWITCHGEAR BUILDING
35	BATTERY ROOM	85	HYDROGEN STORAGE
36	CHARGER/INVERTER/STARTER ROOM	86	STEAM TURBINE HYDROGEN PANEL
37	STG SWITCHGEAR/MCC ROOM	87	WATER TREATMENT NEUTRALISATION POND
38	STEAM TURBINE LUBE OIL EQUIPMENT	88	DEMINERALISED WATER TANK
39	LUBE OIL COOLERS	89	SERVICE WATER AND FIRE WATER TANK
40	COMPRESSED AIR EQUIPMENT	90	AUXILIARY BOILER
41	STEAM TURBINE EQUIPMENT DROP AREA	91	
42	ST GENERATOR SEAL OIL SKID	92	LAYDOWN AREA
43	STEAM TURBINE GENERATOR STEP-UP TRANSFORMER	93	EMERGENGCY DIESEL GENERATOR
		94	BLACK START GENERATOR
44	DIESEL FORWARDING PUMPS	95	STEAM TURBINE GENERATOR
45		96	STEAM TURBINE
46		97	ACC AIR COOLED CONDENSER
47		98	WATER TREATMENT PLANT
48		99	DEMIN WATER TANK
49		100	GAS INLET ESD VALVE SKID
50		101	GAS FILTER-SEPARATORS (2 OFF)
		102	GAS METERING ANALYSIS SKID
		103	GAS PREHEATERS / WATER BATH HEATERS
		104	GAS PRESSURE REDUCTION SKID
		105	GAS OUTLET COALESCING FILTERS
		106	GAS NITROGEN PURGE SKID
		107	GAS ANALYSER CABIN
		108	GAS LOCAL EQUIPMENT ROOM
		109	GAS FLARE / VENT STACK
		110	WASTE WATER TREATMENT AND HANDLING
		111	FIREFIGHTING PUMP HOUSE
		112	DIESEL TANKS
		113	GT + GENERATOR LUBE OIL FIN-FAN COOLER
		114	GT + GENERATOR COOLANT FIN-FAN COOLER
		115	ST + GENERATOR LUBE OIL FIN-FAN COOLER
		116	ST + GENERATOR COOLANT FIN-FAN COOLER
		117	EXAUST STEAM DUCT
		118	CONDENSATE RECEIVER TANK
		119	CONDENSATE EXTRACTION PUMPS
		120	VACUUM/AIR-REMOVAL SKID
		121	DIESEL OFFLOADING BAY

Rev.	Description	Date	Drawn by	Checked by	Approved by
P3	PRELIMINARY DRAWING FOR INFORMATION PURPOSES ONLY	10.7.26			

PRELIMINARY DRAWING
FOR TENDER PURPOSE ONLY

CLIENT:
MABASA ENERGY & FUELS

CONSULTANT:
PDEX CONSULTING (PTY) LTD

CONTRACTOR:

PROJECT TITLE:
PROPOSSED 750MW COMBINED CYCLE GAS TURBINE POWER PLANT IN RICHARDS BAY, CITY OF UMHLATHUZE LOCAL MUNICIPALITY, KWAZULU-NATAL

DRAWING TITLE:
POWER PLANT LAYOUT, AIR COOLED CASE

DRAWING NO. GEN-LAY-0001-SHT1 | REV: P3

SCALE: AS SHOWN | DRAWING SIZE: A1

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