



# **MAGARENG LOCAL MUNICIPALITY**

## **UPGRADE OF INTERNAL WATER NETWORK IN CHRIS HANI, RICHBLOCK AND LAS VEGAS PROGRESS REPORT (SEPTEMBER 2024) – PHASE 1**

### **Q1 PROGRESS REPORT JULY - SEPTEMBER 2024**

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#### Project Details

Client	: MAGARENG LOCAL MUNICIPALITY
Funder	: MIG
Engineers	: BVI CONSULTING ENGINEERS
Contractor	: TR SPAGEN / Lebotebo Projects JV
Total Households to benefit	: 5 932

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## EXECUTIVE SUMMARY

The purpose of this document is to present and report on the current status of the construction project for the period July 2024 to September 2024. The current water project that was implemented by the Magareng Local Municipality for the project known as upgrade of internal water network in Chris Hani, Richblock and Las Vegas – Phase 1.

The project aims to install a 315mmØ uPVC rising main pipeline, spanning 3,186 meters, to connect to a new 400kl pressed steel pressure tower reservoir at Chris Hani. This includes performing pipe jacking beneath both the N12 and N18 roads for the pipeline crossing. Also, the project aims to complete the installation of two 400kl pressed steel pressure tower reservoir, elevated 20 meters, at both Chris Hani and Las Vegas in Ikhukseng township. These installations are designed to enhance water pressure distribution and address issues of low to negative water pressure during peak demand periods.

## PROJECT DETAILS

The area in which the Project Phases 1 was planned, and of which was implemented and currently under construction are shown in the figure below.



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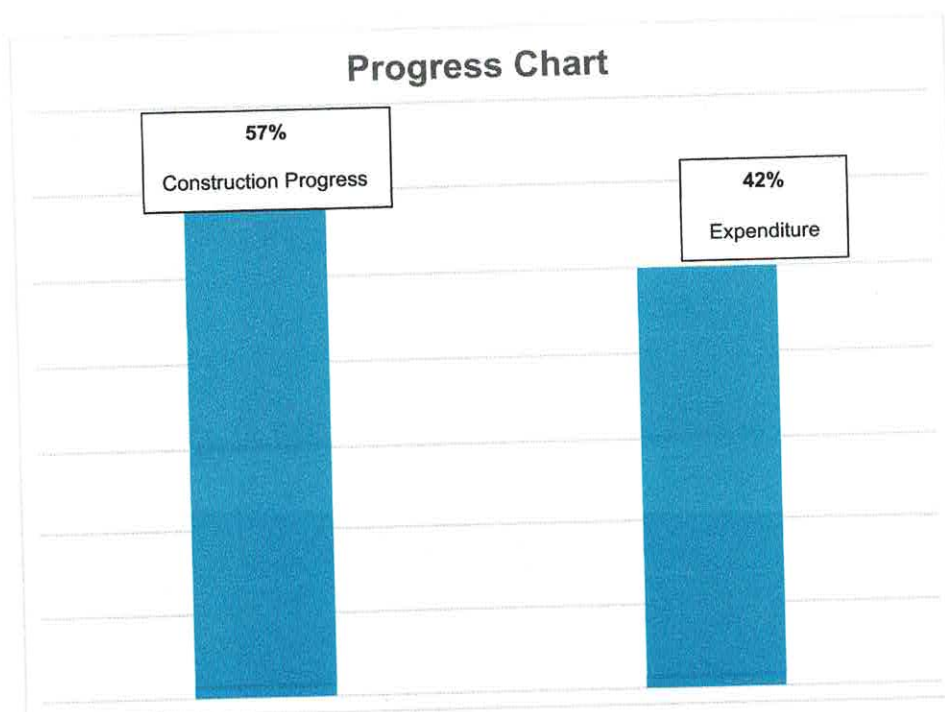
## 1. CONTRACT DETAILS

Contract Description: Phase 1 – Upgrade of internal water network in Chris Hani, Richblock and Las Vegas

Contract No: TECH03/2023/24 (Phase1)	
Site Hand-over	14 June 2024
Anticipated Completion date	13 December 2024
Actual Completion date	TBC
Percentage Time Lapsed	57%
Project Construction Budget	R 21 980 400.16

## 2. PROJECT STATUS

The Financial year allocation for the MIG is **R 12 258 000.00** and the expenditure to date for quarter 1 of the 2024/25 Financial year is **R 4 685 597,22**. The graph below indicates the current implemented project (Phase 1) overall Status to date for Construction Progress and Expenditure



The current construction progress was monitored, and the following progress was recorded for the above-mentioned project Phase 1 to date. The table below indicates the current project construction progress for the implemented project.

### Table 1: Construction Progress

[illegible]

### 3. PROJECT FINANCIAL OVERVIEW

#### 3.1 Construction Cost

The table below indicates the Project Construction current expenditure for the implemented project (Phase 1).

**Table 2: Construction Cost**

Payment Certificate	Amount (Incl. VAT)	Payment Status
Payment Certificate No. 1	R 4 743 236.09	Paid
Payment Certificate No. 2	R 2 162 009.65	Paid
Payment Certificate No. 3	R 1 143 495.60	Paid
Payment Certificate No. 4	R 4 677 072.29	Paid
Payment Certificate No. 5	R 2 768 429.41	Paid
<b>TOTAL</b>	<b>R 15 494 243.03</b>	

#### 3.2 Professional Fees Cost

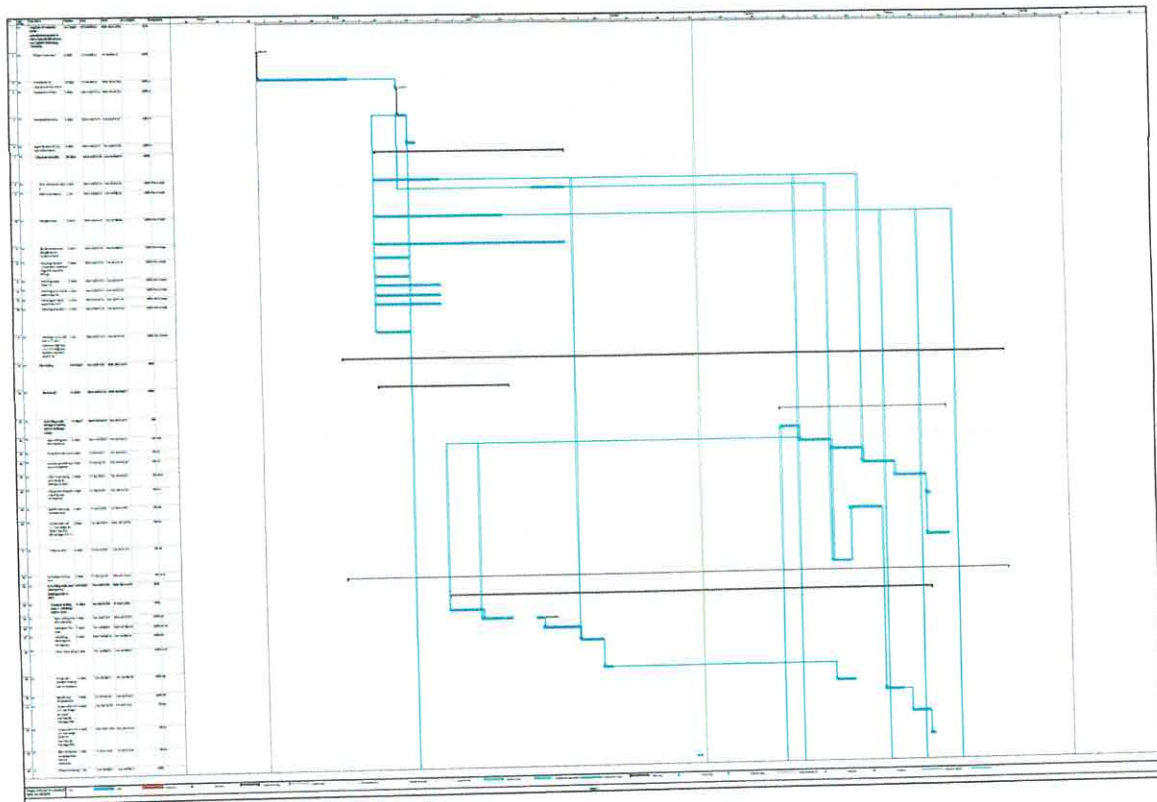
The table below indicates the Project Professional Fees Expenditure for the implemented project (Phase 1).

**Table 3: Professional Fees Summary**

Payment Certificate	Amount (Incl. VAT)	Payment Status
Payment Certificate No. 1	R 1 212 865.08	Paid
Payment Certificate No. 2	R 1 104 218.56	Paid
Payment Certificate No. 3	R 498 705.73	In Progress
<b>TOTAL</b>	<b>R 2 815 789.37</b>	

### 3.3 Project Gantt Chart

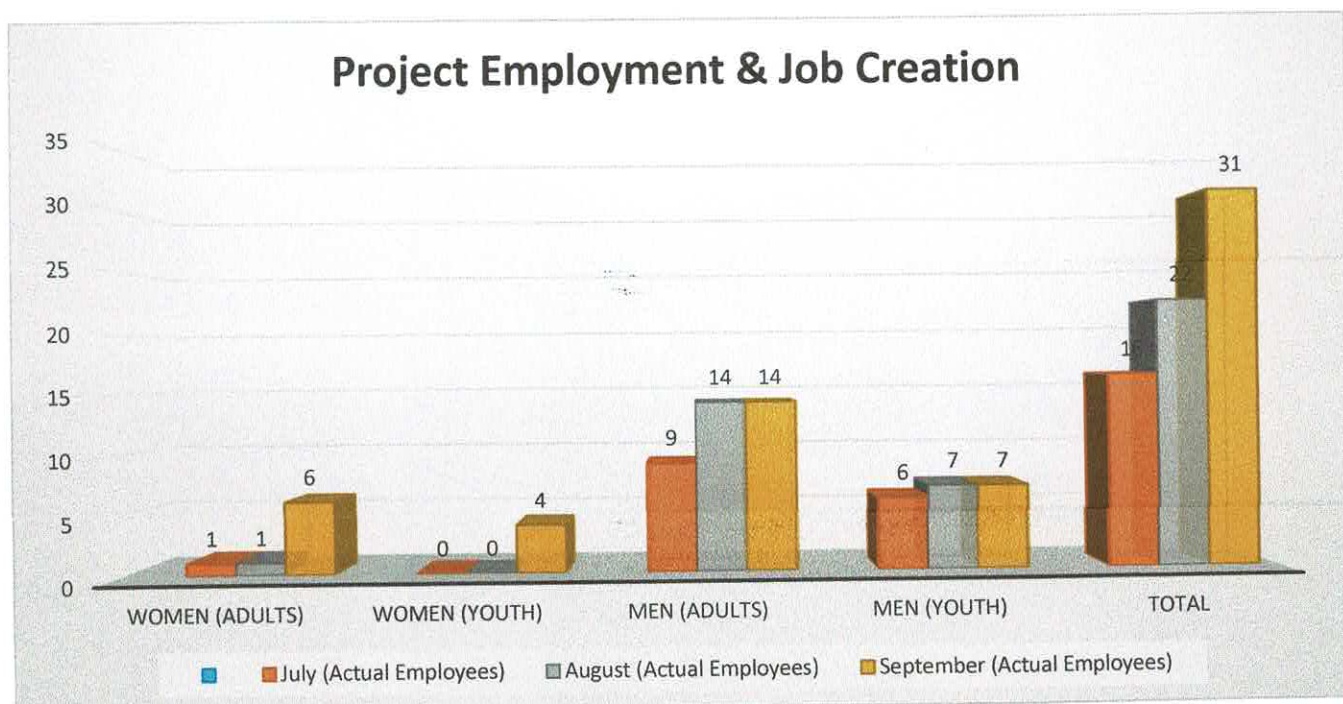
The Project Gantt Chart below indicates the Planned Project Timeline for Phase 1



### 4. PROJECT EMPLOYMENT & JOB CREATION

The Bar Chart below indicates the actual and planned employment and Job Creation for the project known as upgrade on internal water network in Chris Hani, Richblock and Las Vegas (Phase 1).





The project actual & planned employment on Phase 1 is captured in Table below.

Month Employees	Women (Adults)	Women (Youth)	Men (Adults)	Men (Youth)	Total
July (Actual Employees)	1	0	9	6	16
August (Actual Employees)	1	0	14	7	22
September (Actual Employees)	6	4	14	7	31

## 5. PROJECT CHALLENGES

The current implemented project for upgrade of internal water network in Chris Hani, Richblock & Las Vegas (Phase 1) overall progress are very good and only the following challenges was recorded.

1. The excavation along certain sections of the rising main pipeline is encountering hard rock outcrops, necessitating trench blasting in those areas to facilitate excavation.
2. Due to the low water table conditions, the contractor is experiencing water

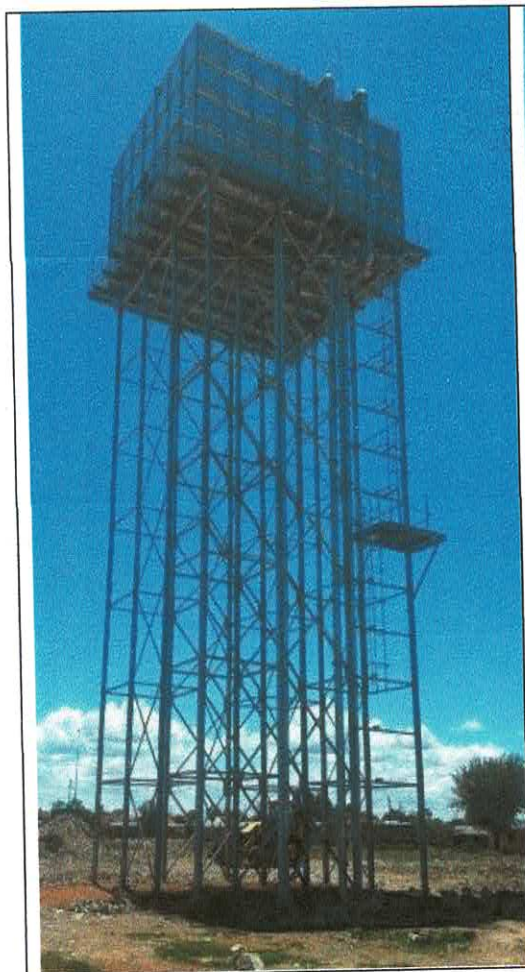


ingress into the trench, which will require the use of additional fill material and geotextile Bidum material to enhance the pipe bedding and blanket installation.

3. Horizontal Drilling underneath the N12 require rock drilling due to Hardrock.
4. Existing pumps dedicated to this project at Magareng pump station are non-operational and need urgent refurbishment and upgrade. More detail in V.O. correspondence.

## 6. PROJECT PHOTOS

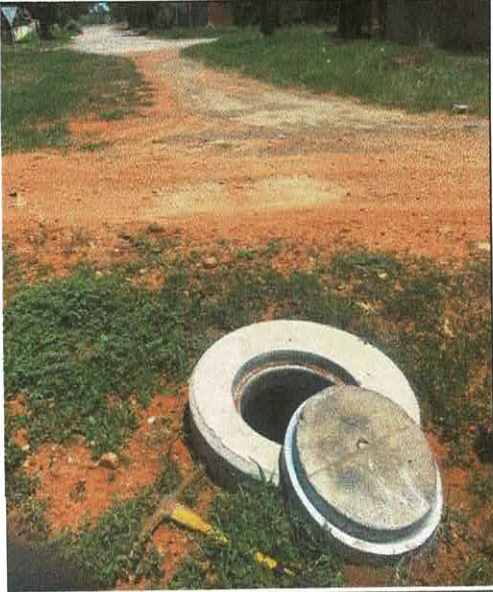
The following pictures was taken during Phase 1 construction of upgrade internal water network in Chris Hani, Richblock and Las Vegas.



Chris Hani Tank



Chris Hani Tank



Air-Valve on pump Main Pipeline



Air-Valve on pump Main Pipeline

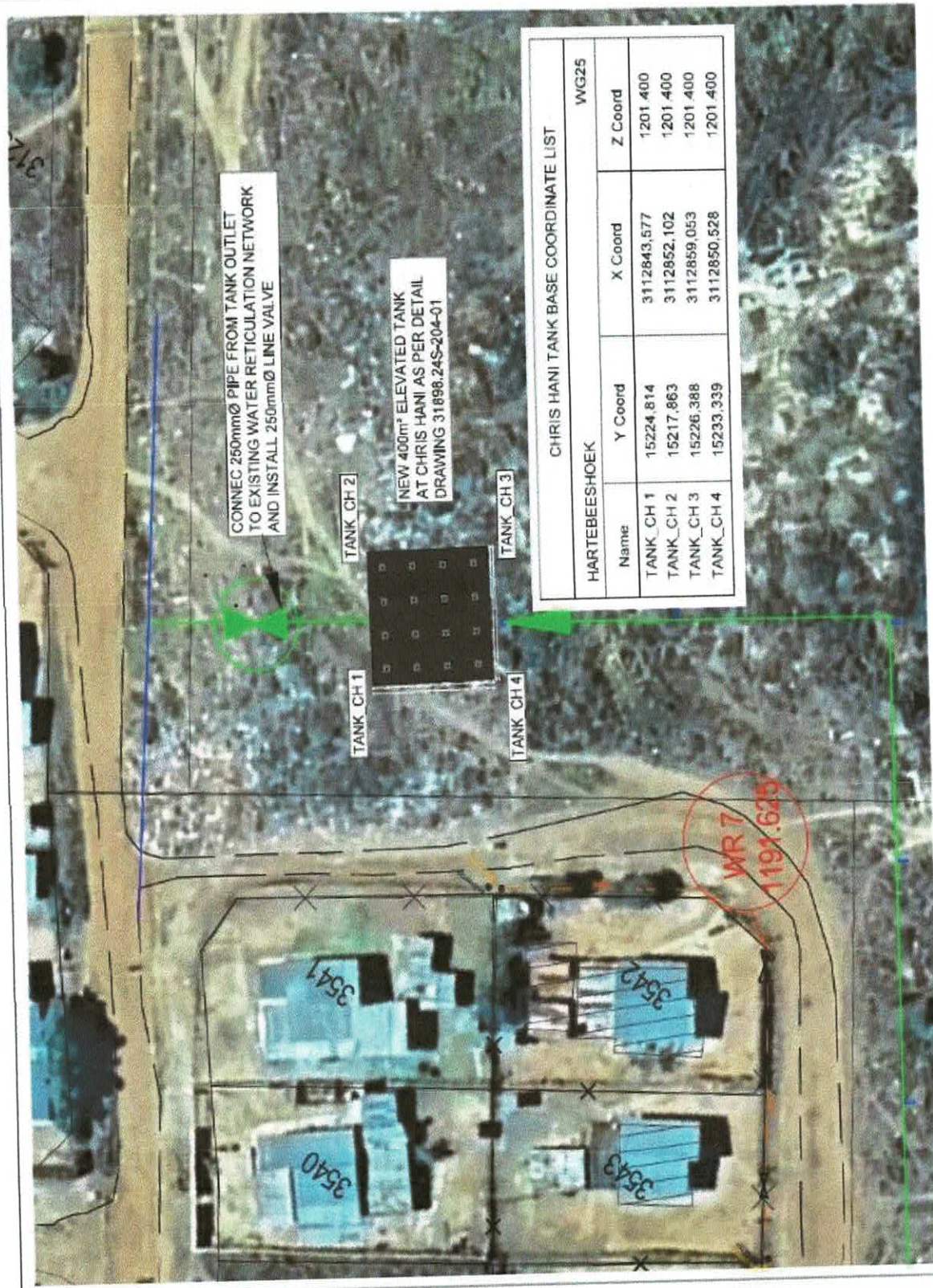


The following Project Drawings Phase 1 for the upgrade of internal water network in Chris Hani, Rich Block and Las Vegas was issued for construction:





			
DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA		DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA	
PROJECT NO: 31898.24S-204-01 DRAWING NO: 31898.24S-204-01		PROJECT NO: 31898.24S-204-01 DRAWING NO: 31898.24S-204-01	
TITLE: NEW 400m³ ELEVATED TANK AT CHRIS HANI		TITLE: NEW 400m³ ELEVATED TANK AT CHRIS HANI	
DRAWN BY: [Name] CHECKED BY: [Name] APPROVED BY: [Name]		DRAWN BY: [Name] CHECKED BY: [Name] APPROVED BY: [Name]	



CONNECT 250mmØ PIPE FROM TANK OUTLET  
TO EXISTING WATER RETICULATION NETWORK  
AND INSTALL 250mmØ LINE VALVE

NEW 400m³ ELEVATED TANK  
AT CHRIS HANI AS PER DETAIL  
DRAWING 31898.24S-204-01

TANK\_CH 2

TANK\_CH 1

TANK\_CH 3

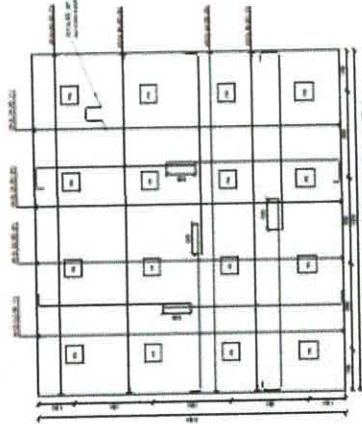
TANK\_CH 4

CHRIS HANI TANK BASE COORDINATE LIST			
WG25			
Name	Y Coord	X Coord	Z Coord
TANK_CH 1	15224.814	3112843.577	1201.400
TANK_CH 2	15217.863	3112852.102	1201.400
TANK_CH 3	15226.388	3112859.053	1201.400
TANK_CH 4	15233.339	3112850.528	1201.400

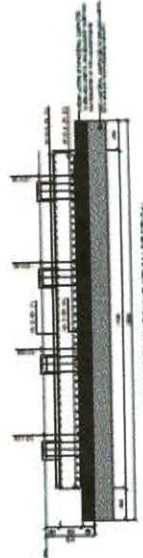




1. ALL DIMENSIONS ARE IN METERS  
 2. ALL MATERIALS TO BE SUPPLIED BY THE CONTRACTOR  
 3. ALL WORK TO BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS  
 4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE DRAWINGS  
 5. ALL WORK TO BE DONE IN ACCORDANCE WITH THE BILL OF MATERIALS  
 6. ALL WORK TO BE DONE IN ACCORDANCE WITH THE SCHEDULE OF WORK  
 7. ALL WORK TO BE DONE IN ACCORDANCE WITH THE PROGRAMME OF WORK  
 8. ALL WORK TO BE DONE IN ACCORDANCE WITH THE PROJECT MANUAL  
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ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
1	CONCRETE	M <sup>3</sup>	100	100	10000
2	STEEL	KG	100	100	10000
3	BRICKS	M <sup>3</sup>	100	100	10000
4	CEMENT	KG	100	100	10000
5	SAND	M <sup>3</sup>	100	100	10000
6	GRAVEL	M <sup>3</sup>	100	100	10000
7	WATER	M <sup>3</sup>	100	100	10000
8	ELECTRICITY	KWH	100	100	10000
9	LABOR	HOUR	100	100	10000
10	TRANSPORT	KM	100	100	10000
11	INSULATION	M <sup>2</sup>	100	100	10000
12	PAINT	LITER	100	100	10000
13	GLASS	M <sup>2</sup>	100	100	10000
14	DOOR	NO.	100	100	10000
15	WINDOW	NO.	100	100	10000
16	ROOF	M <sup>2</sup>	100	100	10000
17	FLOOR	M <sup>2</sup>	100	100	10000
18	WALL	M <sup>2</sup>	100	100	10000
19	CEILING	M <sup>2</sup>	100	100	10000
20	STAIR	M <sup>2</sup>	100	100	10000
21	ELEVATOR	NO.	100	100	10000
22	MECHANICAL	NO.	100	100	10000
23	ELECTRICAL	NO.	100	100	10000
24	PLUMBING	NO.	100	100	10000
25	HEATING	NO.	100	100	10000
26	Cooling	NO.	100	100	10000
27	Lighting	NO.	100	100	10000
28	Security	NO.	100	100	10000
29	Fire	NO.	100	100	10000
30	Other	NO.	100	100	10000

GENERAL  
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CHARTER OF THE  
 TANK FOUNDATION  
 LAYOUT & REAR DETAILS

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**9. CERTIFICATION OF PROGRESS REPORT:  
UPGRADE OF THE WARRENTON WATER TREATMENT WORKS**

**COMPILED BY**



**ANGIE SELEKE**

**TECHNICIAN: TECHNICAL SERVICES DEPARTMENT**

**APPROVED BY**



**TM THAGE**

**ACTING MUNICIPAL MANAGER**