



COORDINATE LIST (WGS - LO29)		
POINT	Y - COORD	X - COORD
SOP-1	39056.184	-2962876.353
SOP-2	39047.651	-2962867.931
SOP-3	39083.921	-2962839.441
SOP-4	39084.364	-2962834.568
SOP-5	39088.303	-2962835.84
SOP-6	39088.303	-2962839.84
SOP-7	39088.749	-2962834.966
SOP-8	39088.749	-2962834.966
SOP-9	39088.749	-2962834.966
SOP-10	39088.749	-2962834.966

NOTES:

GENERAL

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT REFERENCE DRAWINGS AND TYPICAL DETAILS DRAWINGS LISTED IN THE REFERENCE DRAWINGS TABLE.
- ALL DIMENSIONS ON THIS DRAWING ARE IN MILLIMETERS.
- ALL DISCREPANCIES BETWEEN THIS DRAWING AND SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE ENGINEER REQUIRES 24HRS NOTICE FOR ALL INSPECTIONS.

EARTHWORKS

- THE MAXIMUM SAFE BEARING PRESSURE 150kPa.
- ENGINEER TO CONFIRM LEVEL OF TOP OF FOUNDATION ON SITE BEFORE EXCAVATION COMMENCES.
- NO BACKFILLING SHALL COMMENCE UNTIL PERMISSION TO DO SO HAS BEEN GIVEN BY THE ENGINEER. BACKFILLING SHALL BE COMPACTED IN 150 mm LAYERS.

CONCRETE

- ALL CONCRETE WORK TO COMPLY WITH SABS 1200G.
- ALL CULVERTS TO COMPLY WITH SANS 366.
- CONCRETE GRADE :
 - STRIP FOUNDATIONS + 30/20
 - RETAINING WALLS + 30/20
 - BASE SLABS + 30/20
 - BLINDING & MASS CONCRETE + 15/20
- ALL REBAR TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING CONCRETE.
- EXPOSED RETAINING WALL AND HEADWALL SURFACES ARE TO HAVE A SMOOTH FINISH AND HIDDEN SURFACES TO HAVE A ROUGH FINISH.
- ALL FOUNDATION EXCAVATIONS AND LEVELS TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE.
- BASE SLAB TO BE CAST IN ALTERNATING PANELS WITH MOVEMENT JOINTS (MJ) AS DETAILED IN THE TYPICAL DETAILS DRAWINGS.
- BASE SLAB AND CONCRETE SLABS TO BE HAVE A WOOD FLOAT FINISH.
- THE MINIMUM CONCRETE COVER TO ALL REINFORCEMENT IS 50 mm.
- SIX CUBES TO BE TAKEN PER POUR. THREE TO BE TESTED AT SEVEN DAYS, THE REMAINDER AT TWENTY EIGHT DAYS. THE RESULTS TO BE FORWARDED TO THE ENGINEER TIMOUSLY.
- ALL STRUCTURAL CONCRETE TO BE CURED FOR A MINIMUM OF FIVE DAYS. THE METHOD OF CURING SHALL BE APPROVED BY THE ENGINEER.
- ALL EXPOSED CONCRETE CORNERS TO HAVE 20 x 20 mm CHAMFER.

REFERENCE DRAWINGS

- FOR GENERAL ARRANGEMENT AND PIPE CROSSING LOCALITY SEE DWG: 0.61/96346-03
- FOR ACCESS ROADS SEE DWG: 0.61/96772-01
- FOR PIPE DETAILS SEE DWG: 0.61/96772-02
- FOR REINFORCEMENT DETAILS SEE DWGS: 0.61/96773-20 - 0.61/96773-36
- FOR JOINT DETAILS SEE DWG: 0.61/96772-01

ABBREVIATIONS

- TOC - TOP OF CONCRETE
- TOP - TOP OF FOUNDATION
- TOW - TOP OF WALL
- SOP - SETTING OUT POINT
- MJ - MOVEMENT JOINT
- U - ISOLATION JOINT
- NGL - NATURAL GROUND LEVEL

Pipe Jacking Notes

- General Notes:**
 - Concrete pipes to be installed by means of pipe jacking to ensure no disruption to the operational conveyor systems.
 - Pipe jacking to be done through an Ash Body (Ash properties to be provided to pipe jacking contractor by the Engineer).
 - Contractor shall verify all dimensions and conditions in the field before commencing work.
 - Any discrepancies in the drawings or specifications should be reported to the Engineer immediately.
- Pipe Specifications:**
 - Pipes to be jacked are to be reinforced concrete pipes (RCP) Class 100D with a nominal diameter of 1473 mm and a minimum wall thickness of 152 mm.
 - Joints shall be done using the sliding rubber ring principle and a lubricant is required.
- Jacking Equipment:**
 - Jacking frame and all equipment must be inspected and approved by the engineer before use.
- Alignment and Tolerances:**
 - Horizontal and vertical alignment must not deviate more than 25 mm from the specified line and grade.
 - Contractor to utilize a dumpy level and a total station for alignment verification.
- Construction Sequence:**
 - Establish and secure jacking and receiving pits as per the dimensions and locations indicated on the drawings.
 - Install thrust block and set up the jacking frame in jacking pit.
 - Advance the shield/TBM and pipes as specified, maintaining constant monitoring of alignment and grade.
- Ground Support:**
 - Shoring of the jacking and receiving pits shall be per OSHA standards.
 - Dewatering systems must be operational and maintained throughout the jacking process.
- Quality Control:**
 - Engineer to inspect pipe joints before and after jacking for any signs of damage or misalignment.
 - Maintain daily logs of jacking operations, including thrust pressures, pipe lengths installed, and any issues encountered.
 - Submit all testing results and inspection reports to the engineer for review.
- Safety Precautions:**
 - All personnel entering the pit must be equipped with appropriate personal protective equipment (PPE).
 - Emergency response plan and communication protocol to be established and reviewed with all site personnel.

D.O.		REV	DATE	INDEX REFERENCE	REV	DATE	INDEX REFERENCE	REV	DATE	INDEX REFERENCE
01		01.05.2024	ISSUE FOR TENDER							
02		08.07.2022	ISSUE FOR CONSTRUCTION							
03		08.07.2022	ISSUE FOR CONSTRUCTION							
04		08.07.2022	ISSUE FOR CONSTRUCTION							
05		08.07.2022	ISSUE FOR CONSTRUCTION							
06		08.07.2022	ISSUE FOR CONSTRUCTION							
07		08.07.2022	ISSUE FOR CONSTRUCTION							
08		08.07.2022	ISSUE FOR CONSTRUCTION							
09		08.07.2022	ISSUE FOR CONSTRUCTION							
10		08.07.2022	ISSUE FOR CONSTRUCTION							
11		08.07.2022	ISSUE FOR CONSTRUCTION							
12		08.07.2022	ISSUE FOR CONSTRUCTION							
13		08.07.2022	ISSUE FOR CONSTRUCTION							
14		08.07.2022	ISSUE FOR CONSTRUCTION							
15		08.07.2022	ISSUE FOR CONSTRUCTION							
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21		08.07.2022	ISSUE FOR CONSTRUCTION							
22		08.07.2022	ISSUE FOR CONSTRUCTION							

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TUTUKA POWER STATION
ASH DISPOSAL FACILITY
SITE SERVICES
CONCRETE PIPE No. 12

ISSUED FOR TENDER

THIS DRAWING HAS BEEN CREATED ON A C.A.D. SYSTEM.
ANY AMENDMENT MUST BE EFFECTED ON THE SAME SYSTEM



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SHEET 14

REV 01