

ERONGO REGIONAL COUNCIL BIDDING DOCUMENT

REPLACEMENT OF BULK WATER PIPELINE FOR A DISTANCE OF 3KM IN UIS SETTLEMENT AREA, ERONGO REGION.

NAME OF BIDDER:	
BID AMOUNT (INCL VAT):	

CLOSING DATE AND TIME: 15 July 2025 at 10h00

PROCUREMENT REFERENCE: W/ONB/ERC -002/2025/2026

COST: N\$300.00(Non-refundable, VAT Inc)

The Secretary
Head of Procurement Management Unit
Erongo Regional Council,
Private Bag 5019,
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Namibia.

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Foreword

The Standard Bidding Documents for Procurement of Works have been prepared by the Procurement Policy Unit for use by public entities under the Public Procurement Act, 2015 and are based on the World Bank's Standard Bidding Documents. They are to be used for the procurement of works to the value of N\$ 50 Million through Open National Bidding (ONB) method. The Bidding Documents assume that no prequalification has taken place before bidding. Those wishing to submit comments or suggestions on the Bidding Document or to obtain additional information on procurement in Namibia are encouraged to contact:

THE DIRECTOR

Procurement Policy Unit,
Ministry of Finance,
Head Office Building, 6th Floor, Moltke Street,
Private bag 13295,
Windhoek Namibia

Tel: No. 00-264-61-209 2463 & Fax: 00-264-61-230 179

Preface

This Bidding Document for Procurement of Works has been adopted from the standard bidding document issued by the Procurement Policy Unit for works up to the value of N\$ 50M. It can be used in the award of admeasurement (unit prices or unit rates in a bill of quantities) and lump sum types of contracts, which are the most common in works contracts.

Lump sum contracts are used in particular for buildings and other forms of construction where the works are well defined and unlikely to change in quantity or specifications, and where encountering difficulties or unforeseen site conditions (for example, hidden foundation problems) is unlikely. Lump sum contracts should be used for works that can be defined in their full physical and qualitative characteristics before bids are called, or where the risks of substantial design variations are minimal. In lump sum contracts, the concept of priced "activity schedule" is used, to enable payments to be made based on percentage completion of each activity.

This document is recommended for works value of up to N\$ 50M. However, in specific circumstances it may be used for values slightly higher with the approval of the Procurement Policy Unit.

SUMMARY DESCRIPTION

This Standard Bidding Document for procurement of Works is to be used when a prequalification process has not taken place before bidding and, therefore, post qualification applies. A brief description of these documents is given below:

SBD FOR PROCUREMENT OF WORKS.

PART 1- BIDDING PROCEDURES

Section I

Instructions to Bidders (ITB)

This Section provides relevant information to help Bidders prepare their bids. Information is also provided on the submission, opening and evaluation of bids and on the award of Contracts. **Section I contains provisions that are to be used without modification.**

Section II.

Bidding Data Sheet

This Section consists of provisions that are specific to each procurement and that supplement the information or requirements included in Section I, Instructions to Bidders.

Section III. Bidding Forms

This Section contains the forms, which are to be completed by the Bidder and submitted as part of his Bid.

Section IV. Evaluation Criteria

This section contains supplementary evaluation criteria which the Employer may choose to apply to the procurement under consideration.

PART 2 - EMPLOYER'S REQUIREMENTS

Section V. Employer's Requirements

This Section contains the Specifications, the Drawings, and supplementary information that describe the Plant and Installation Services to be procured.

PART 3 - CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VI. General Conditions of Contract

This Section contains the general clauses to be applied in all contracts. The text of the clauses in this Section shall not be modified.

Section VII. Special conditions of contract

The contents of this Section supplement the General Conditions of Contract and shall be prepared by the Employer.

Section VIII. Contract forms

This section contains forms that, once completed, will form part of the contract. The forms for performance security and advance payment security, when required, shall only be completed by the successful bidder after contract award.

CHECKLIST SCHEDULE

Procurement Reference No.: W/ONB/ERC -002/2024/2025

Description	Attached	Not attached	ITB Reference
Certified copy of a full company registration certificate			13.1 (f)
Original or certified copy of valid good standing tax certificate			13.1 (f)
Original or certified copy of valid good standing social security certificate			13.1 (f)
Valid certified copy of Affirmative action compliance certificate			13.1 (f)
Valid SME Registration certificate			13.1 (f)
Evidence of Signatory Authorized to sign the bid (if applicable)			6.2 (a)
Major items of contractor's equipment			6.2 (d)
Qualifications and experience of key personnel			6.2 (e)
Proposed subcontracts and firms involved (if applicable)			6.2 (j)
Proposed work program			6.1
Latest Company profile			18.1
Description of proposed work methodology			18.1 & 6.1
Financial reports for the last three years			6.2 (f)
Copies/evidence of access to financial resources and the bank rating.			6.2 (g)
Details of banks that may provide references			6.2 (h)
List of similar projects completed by the bidder with proof (references/completion certificates)			6.2 (c)
The form of bid			13.1 (f)
Bid securing declaration			13.1 (f)
Priced activity schedule			13.1 (f)
Any additional information (specify)			

Disclaimer: The list defined above is meant to assist the bidder in submitting the relevant documents and shall not be ground for the bidder to justify its non–submission of major documents for its bid to be responsive. The onus remains on the bidder to ascertain that it has submitted all the documents that have been requested and are needed for its submission to be complete and responsive.

Standard Bidding Document

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PART 1 – Bidding Procedures

Section 1 - Instructions to Bidders

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Section I - Instructions to Bidders

A. General

1. Scope of Bid

1.1 The Public Entity as defined¹ in Section II "Bidding Data Sheet" (**BDS**) also referred to herein as Employer invites bids for the construction of Works, as **described in the BDS** and Section VII, "Special Conditions of Contract" (SCC).

The name and identification number of the Contract are **provided in the BDS and the SCC**.

- 1.2 The successful Bidder shall be expected to complete the Works by the Intended Completion Period **specified in the BDS**.
- 1.3 Throughout these bidding documents, the terms:
 - (a) the term "in writing" means communicated in written form (e.g. by mail, e-mail, fax,) with proof of receipt;
 - (b) if the context so requires, "singular" means "plural" and vice versa;
 - (c) "day" means calendar day unless otherwise stated; and
- 2. Source of Fund
- 2.1 The Works shall be financed by the Public Entity's own budgetary allocation, **unless otherwise stated in the BDS.**
- 3. Public Entities
 Related to
 Bidding
 Documents & to
 application for
 review
- 3.1 The public entities related to these bidding documents are the Public Entity, acting as procurement entity (Purchaser), the Procurement Policy Unit, in charge of issuing standard bidding documents and responsible for any amendment these may require, the Central Procurement Board in charge of vetting Bidding document, receiving and evaluation of bids in respect of major contracts and the Review Panel, set up under the Public Procurement Act, 2015 (hereinafter referred to as the Act.)

The Chairperson Review Panel Ministry of Finance Private Bag 13295 Windhoek, Namibia

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See Section IV, "General Conditions of Contract," Clause 1. Definitions.

4. Fraud and Corruption

- 4.1 The Government of the Republic of Namibia requires that bidders/suppliers/contractors, participating in procurement in Namibia, observe the highest standard of ethics during the procurement process and execution of contracts.
- 4.2 The Employer will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;

For the purposes of this Sub-Clause:

- (i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- (iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- (v) "obstructive practice" is deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation.
- 4.3. Bidders, suppliers and public officials shall also be aware of the provisions stated in section 67 and 68 of the Public Procurement Act, 2015 which can be consulted on the website of the Procurement Policy Unit (PPU): www.mof.gov.na/procurement-policy-unit

- Eligible Bidders 5.1 A Bidder may be a natural person, private entity, or government-owned entity or any combination of them in the form of a joint venture, under an existing agreement, or with the intent to constitute a legally enforceable joint venture. All partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms.
 - A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
 - (a) they have a controlling partner in common; or
 - (b) they receive or have received any direct or indirect subsidy from any of them; or
 - (c) they have the same legal representative for purposes of this bid: or
 - (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
 - (e) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the party is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid;
 - (f) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or
 - (g) a Bidder, or any of its affiliates has been hired (or is proposed to be hired) by the Employer as Engineer for the contract.
 - 5.3 (a) A bidder that is under a declaration of ineligibility by the Government of Namibia in accordance with applicable laws at the date of the deadline for bid submission and thereafter shall be disqualified
 - (b)Bids from contractors appearing on the ineligibility lists of African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank Group and World Bank Group shall be rejected.

5.4 Government-owned enterprises in the Republic of Namibia shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law, and that they are not a dependent agency of the Government.

6. Qualifications of Bidders

- 6.1 All bidders shall provide in Section III, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- 6.2 Bidders shall include the information and documents listed hereunder with their bids, unless otherwise **stated in the BDS**. The non-submission of the documents by the Bidder within the prescribed period may lead to the rejection of its bid.
 - (a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business of the Bidder;
 - (b) total monetary value of construction works performed for each of the last five years;
 - (c) experience in works of a similar nature and size for each of the last five years or as otherwise **stated in the BDS**; and clients who may be contacted for further information on those contracts;
 - (d) major items of construction equipment proposed to carry out the Contract;
 - (e) qualifications and experience of key site personnel and technical personnel proposed for the contract;
 - (f) report on the financial standing of the Bidder for the last three years, such as certified copies of Financial Statements/Audited Accounts as filed at the Registrar of Companies;
 - (g) evidence of adequacy of working capital for this Contract (access to line(s) of credit and availability of other financial resources);
 - (h) authority to seek references from the Bidder's bankers; and
 - (i) information regarding any litigation, current or during the last five years, in which the Bidder was/is involved, the parties concerned, the issues involved, the disputed amounts, and awards;
 - (j) proposals for subcontracting components of the Works amounting to more than 10 percent of the Contract Price.

- 6.3 To qualify for award of the Contract, bidders shall meet the following minimum qualifying criteria:
 - (a) a minimum average annual financial amount of construction work over the period **specified in the BDS**.
 - (b) experience as prime contractor in the construction of a minimum number of works of a nature and complexity equivalent to the Works over a period as **specified in the BDS** (To comply with this requirement, works cited should be at least 70 percent complete);
 - (c) proposals for the timely acquisition (own, lease, hire, etc.) of the essential equipment **listed in the BDS**;
 - (d) a Contract Manager/Supervisor with three years' experience in works of an equivalent nature and volume, including no less than three

years as Manager or as otherwise specified in the BDS; and

(e) liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of not less than the amount **specified in the BDS**.²

A consistent history of litigation or arbitration awards against the Applicant or any partner of a Joint Venture may result in disqualification.

B. Contents of Bidding Document

7. Sections of Bidding Document

7.1 The Bidding Document consists of all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 10.

Section I - Instructions to Bidders (ITB)

Section II- Bidding Data Sheet

Section III - Evaluation Criteria

Section IV - Bidding Forms

Section V - Employer's Requirements

Section VI – General Conditions of Contract

Section VII- Special Conditions of Contract

Section VIII - Contract Forms

7.2 The Invitation for Bids issued by the Employer is not part of the Bidding Document.

Usually the equivalent of the estimated payments flow over 4-6 months at the average (straight-line distribution) construction rate. The actual period of reference shall depend on the speed with which the Government shall pay the Contractor's monthly certificates.

8. Clarification of Bidding Document

8.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's address **indicated in the BDS.**

The Employer will respond in writing to any request for clarification, provided that such request is received 14 days prior to the deadline for submission of bids.

Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 10.

9. Site visit/Prebid meeting

- 9.1 Bidders, at the Bidders' own responsibility and risk, are encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing their Bids and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidders' own expense.
- 9.2 The Bidder or its designated representative is invited to attend a pre-bid meeting, as **provided for in the BDS**. The purpose of the pre-bid meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

10. Amendment of Bidding Document

10.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda and extend the deadline for submission of bids, if needed.

C. Preparation of Bids

11. Cost of Bidding

- 11.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs irrespective of the outcome of the bidding process.
- 12. Language of Bid
- 12.1 The Bid, supporting documents as well as all correspondence relating to the bid exchanged by the Bidder and the Employer shall be in English Language.

13. Documents Comprising the Bid

- 13.1 The Bid submitted by the Bidder shall comprise the following:
 - (a) The Form of Bid (in the format indicated in Section III);
 - (b) Bid Securing declaration;
 - (c) Priced Activity Schedule;
 - (d) Qualification Information Form and Documents;
 - (e) Alternative offers where invited;

- (f) following documentary evidence (required from Namibian bidders);
- √ have a valid <u>certified copy</u> of a full company Registration Certificate;
- √ have an <u>original or certified copy of a</u> valid good Standing Tax Certificate;
- ✓ Certified copy(s) of Identity Documents (ID) for owner(s) of the Company partaking in the Bid
- ✓ have an <u>original or certified copy of a</u> valid good Standing Social Security Certificate;
- ✓ have a valid <u>certified copy</u> of Affirmative Action Compliance Certificate, proof from Employment Equity Commissioner that bidder is not a relevant employer, or exemption issued in terms of Section 42 of the Affirmative Action Act, 1998;
- ✓ have a certified copy of a valid SME certificate;
- ✓ An undertaking on the part of the Bidder that the salaries and wages payable to its personnel in respect of this proposal are compliant to the relevant laws, where applicable and that it will abide to sub-clause 6.8 of the General conditions of Contract if it is awarded the contract or part thereof; and;
- ✓ Attach a <u>certified copy</u> of a valid Fitness Certificate from any Local Authority within Namibia;
- ✓ All pages of the Biding documents and all the Annexures (Attachments) must be initialled,
- ✓ All copies of the originals documents must be fully (all pages) certified by Commissioner of Oaths
- ✓ Pages must be signed and stamped where you are required to sign and stamp
- ✓ A Power of Attorney authorizing the signatories to sign on behalf of the Bidder,
- ✓ Must submit a fully completed Bid Submission and Bid Securing Declaration
- **✓** Must fully complete the Special Condition of Contract
- ✓ A Bidder MUST submit proof of financial availability amounting to N\$ 1 200 000.00 from a recognised and accredited Financial Institution in Namibia. NB: No Letter of Intent will be considered.
- ✓ Reference check (including physical site inspections) will be done by Erongo Regional Council from the documents (completion certificates, testimonials etc) submitted by the Bidders.
- ✓ BIDDERS PREVIOUSLY / CURRENTLY CONTRACTED BY ERONGO REGIONAL COUNCIL AND HAVE NOT COMPLETED THE PROJECTS WITHIN THE INTENDED COMPLETION TIMEFRAME WILL NOT BE CONSIDERED.

NB: Failure to adhere, attach and complete the required above, will lead to an automatic disqualification.

- 14. Bid Submission Form and Schedules
- 14.1 The Bid Submission Form, Schedules, and all documents listed under ITB 13.1 shall be prepared using the relevant forms, if so provided.
- 15. Alternative Proposal
- 15.1 Alternative Technical Proposals and completion dates if allowed shall be indicated in Section V- Specifications. The evaluation methodologies for their consideration shall be given in Section III.
- 16. Bid Prices and Discounts
- 16.1 The Contract shall be for the whole Works, as described in ITB Sub-Clause 1.1, based on the priced Activity Schedule/Bill of Quantities³ submitted by the Bidder.
- 16.2 Bidders shall fill in rates and prices for all items of the Works described in the Bill of Quantities.⁴ Items for which no rate or price is entered by Bidders, shall not be paid for by the Public Entity when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. Corrections, if any, shall be made by crossing out, initialling, dating and rewriting.
- 16.3 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 14 days prior to the deadline for submission of bids, shall be included in the rates, prices, and total Bid price submitted by Bidders.⁵
- 16.4 The price to be quoted in the Bid Submission Form shall be the total price of bid after any discount offered.
 - The discount if any and the conditions of its application shall be indicated separately.
- 17. Currencies of Bid and Payment
- 17.1 The bid price and rates shall be in Namibian Dollars and fixed for the duration of the contract unless otherwise **specified in the BDS.**
- 17.2 Unless otherwise **specified in BDS** interim payment for Plant and Material on site is applicable as per GCC 39.7.
- 18. Documents
 Comprising the
 Technical
 Proposal
- 18.1 The Bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in the Bidder Qualification Form (section IV), in sufficient details to

demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.

19. Period of Validity of Bids

- 19.1 Bids shall remain valid for a period **specified in the BDS.** The Bid Validity period should not exceed 180 days.
- 19.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request that the bidders extend the period of validity for a specified additional period. The request and the responses thereto shall be made in writing.

20. Bid Security/Bid Securing Declaration

- 20.1 Either the Bidder shall furnish a subscription to a Bid Securing Declaration or a Bid Security in its original form with its bid as part of its bid, if so **required in the BDS**.
- 20.2 Bid Security shall be in the form of a Bank Guarantee from a local commercial bank as per the format contained in section IV and shall be valid for a period of 30 days beyond the validity period of the bid or beyond any period of extension.
- 20.3 Any bid not accompanied by an enforceable and substantially compliant Bid Security or a subscription to a Bid Securing Declaration in the Bid Submission Form, if required in accordance with ITB 20.1, shall be rejected by the Employer as non-responsive.
- 20.4 Bid Security shall be forfeited or the Bid Securing declaration exercised for non-compliance on the part of the Bidder for reasons mentioned in the Bid Security format contained in Section III or the Bid Suring Declaration contained as Appendix to the Bid Submission Form.

21. Format and Signing of Bid

- 21.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 13.1 and clearly mark it "ORIGINAL". In addition, the Bidder shall submit the number of copies **as specified in the BDS**, clearly mark with the label "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 21.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder.

D. Submission and Opening of Bids

22. Sealing and Marking of Bids

- 22.1 Bidders may always submit their bids by mail or by hand. Procedures for submission, sealing and marking are as follows:
 - (a) Bidders submitting bids by mail or by hand shall enclose the original and each copy of the Bid, including alternative bids, if permitted in accordance with ITB 15, in separate sealed envelopes, duly marking the envelopes as

"ORIGINAL", "ALTERNATIVE" and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope. The rest of the procedure shall be in accordance with ITB sub-Clauses 22.2.

- 22.2 The inner and outer envelopes shall:
 - (a) bear the name and address of the Bidder;
 - (b) be addressed to the Employer as indicated in ITB 22.1;
 - (c) bear the specific identification of this bidding process indicated in accordance with ITB 1.1; and
 - (d) bear a warning not to open before the time and date for bid opening.
- 23. Deadline for Submission of Bids
- 23.1 Bids shall be delivered to the Employer at the address and no later than the time and date **specified in the BDS**.

The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 10.

- 24. Late Bids
- 24.1 Late bids shall not be considered. They will be returned unopened
- 25. Withdrawal, Substitution, and Modification of Bids
- 25.1 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Submission Form or any extension thereof.
- 26. Bid Opening
- 26.1 The Employer shall open the bids at the time place and address **specified in the BDS** in the presence of Bidders` designated representatives who choose to attend.
- 26.2 The bidders' names, the Bid Prices, the total amount of each bid, any discounts, any alternative bid, bid modifications and withdrawals, the presence or absence of bid security, and such other details as the Employer may consider appropriate, will be announced and recorded by the Employer at the opening.

E. Evaluation and Comparison of Bids

27. Confidentiality

27.1 Information relating to the examination, evaluation, comparison, and post-qualification of bids and recommendation of contract award, shall not be disclosed to Bidders or any other person not officially concerned with such process.

27.2 Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.

28. Clarification of Bids

28.1 To assist in the examination, evaluation, and comparison of the bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its bid. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetical errors discovered by the Employer in the evaluation of the bids, in accordance with ITB 31.

29. Determination of Responsiveness

29.1 The Employer's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB13.

- 29.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission.
- 29.3 The Employer shall examine the technical aspects of the bid submitted in accordance with ITB 18, Technical Proposal, in particular, to confirm that all requirements of Section V (Employer's Requirements) have been met without any material deviation, reservation or omission.
- 29.4 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

30. Nonconformitie s, Errors, and Omissions

30.1 Provided that a bid is substantially responsive, the Employer may waive any non-material non-conformity in the bid, request that the Bidder submit the necessary information or documentation, to rectify nonmaterial nonconformities in the bid related to documentation requirements but not related to any aspect of the price of the bid; and shall rectify quantifiable nonmaterial nonconformities related to the Bid Price.

31. Correction of Arithmetical Errors

- 31.1 Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:
 - (a) only for unit price contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;

- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- 32. Margin of Preference
- 32.1 **Unless otherwise specified in the BDS**, Margin of preference shall not apply.
- 33. Evaluation of Bids
- 33.1 The Employer shall use the criteria and methodology defined in this clause and no other evaluation criteria or methodologies shall be permitted.
- 33.2 To evaluate a bid, the Employer shall consider the following:
 - (a) the bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities for admeasurement contracts or Schedule of Prices for lump sum contracts, but including Day work items, where priced competitively; and
 - (b) Price adjustment for correction of arithmetic errors, discounts, non-conformities, due to the supplementary criteria as defined in Section III, and Margin of Preference, if applicable.
- 33.3 If this Bidding Document allows Bidders to quote separate prices for different contracts, and to award multiple contracts to a single Bidder, the methodology to determine the lowest evaluated price of the contract combinations, including any discount offered in the Bid Submission Form, is specified in Section III (Evaluation and Qualification Criteria).
- 33.4 If the bid for an admeasurement contract, which results in the lowest Evaluated Bid Price, is seriously unbalanced, front loaded or substantially below updated estimates or if any item in the Priced Activity Schedule is front loaded or contains an erroneous amount in the opinion of the Employer, the Employer may after clarification require the Bidder to produce detailed price analysis for any or all items that the amount of the performance security be increased at the expense of the Bidder.
- 34. Comparison of Bids
- 34.1 The Employer shall compare all substantially responsive bids in accordance with ITB 33 to determine the lowest evaluated bid.
- **35.** Qualification of the Bidder
- 35.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated substantially responsive bid meets the qualifying criteria.

36. Employer's Right to Accept Any Bid, and to Reject Any or All Bids

36.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders.

F. Award of Contract

37. Award Criteria

37.1 Subject to ITB 36.1, the Employer shall award the Contract to the Bidder whose offer has been determined to be substantially responsive.

38. Notification of Award

- 38.1 Prior to the expiration of the period of bid validity, the Employer shall, for contract amount above the prescribed threshold of N\$ 2 M, notify the selected bidder of the proposed award and accordingly notify unsuccessful bidders. Subject to Challenge, the Employer shall notify the selected Bidder, in writing, by a Notification of award for award of contract. The Notification of award shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price") and the requirement for the Contractor to remedy any defects therein as prescribed by the Contract. Within seven days from the issue of notification of award, the Purchaser shall publish on the Public Procurement Portal (www.mof.gov.na/procurementpolicy-unit) and the Purchaser's website, the results of the Bidding Process identifying the bid and lot numbers and the following information:
 - (i) name of the successful Bidder, and the Price it offered, as well as the duration and summary scope of the contract awarded; and
 - (ii) an executive summary of the Bid Evaluation Report.
- 38.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

39. Signing of Contract

- 39.1 Promptly upon issue of notification of award, the Employer shall send to the successful Bidder the Contract Agreement.
- 39.2 Within Seven (7) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.

40. Performance Security

- 40.1 Within Twenty One (21) days of the receipt of the notification of award from the Employer, the successful Bidder shall furnish the Performance Security in accordance with the conditions of contract, using for that purpose the Performance Security Form included in Section VIII (Contract Forms).
- 40.2 Failure of the successful Bidder to submit the abovementioned Performance Security or to sign the Contract Agreement within the prescribed delay shall constitute sufficient grounds for the annulment of the award/ automatic disqualification of the award.
- 41. Plant and Materials on site
- 41.1 Unless otherwise **specified in BDS** interim payment for Plant and Material on site is applicable as per GCC 39.7.
- 42. Debriefing
- 42.1 The Purchaser shall promptly attend to all debriefing for the contract made in writing and within 30 days from the date of the publication of the award or date the unsuccessful bidders are informed about the award.

Section II. Bidding Data Sheet (BDS)

The following specific data for the works to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

	A. General				
ITB 1.1	The Public Entity is: Erongo Regional Council				
	The Works are Replacement Of Bulk Water Pipeline For A Distance Of 3km In Uis Settlement Area, Erongo Region.				
	The name and identification of the Contract are:				
	The Project is Replacement Of Bulk Water Pipeline For A Distance Of 3km In Uis Settlement Area, Erongo Region.				
ITB 1.2	The Intended Completion period is 6 Months from start date				
ITB 2.1	The Funding Agency is: Erongo Regional Council				
ITB 5.3	A list of firms debarred from participating in Public Procurement in Namibia is available at http://www.mof.gov.na/procurment -policy-unit				
	A list of firms debarred by World Bank is available at http://www.worldbank.org/debarr				
ITB 6.2	The information required from bidders in ITB Sub-Clause 5.2 is modified as follows: None				
ITB 6.2 (c)	Bidders must provide evidence of experience in works of similar nature, size and complexity for each of the last five years, of which the last 5 years must have been in construction of sewer and water reticulation services.				
	Bidders must provide references of clients who may be contacted for further information on those contracts.				
ITB 6.3 (a)	The Contractor must have a minimum average annual financial amount of construction of N\$ 3 Million over the last 3 years .				
ITB 6.3 (b)	The number of works is: at least Five (5)				
	The period is: Five (5) <i>years</i>				
	Required Minimum Experience of contractors				
	i. Construction of sewer and water reticulation services as a prime contractor				
ITB 6.3 (c)	The essential equipment to be made available for the Contract by the successful Bidder shall be:				
	Hard rock excavation equipment/ heavy duty excavator/ Hard rock blasting specialist agreement				

- Hauling Equipment (Tipper Trucks)
- Compaction Equipment

NB: In the given table under clause 1.4 in section IV, qualification information, the bidder shall state each item of major plant, which he guarantees to provide on the site for the duration of the contract. Bidder should provide proof of ownership of the above-mentioned equipment or a signed lease agreement in case the bidder intends to hire the equipment. A letter of intent is not acceptable

ITB 6.3 (d)

Bidders shall provide detailed CV of the contractor's project team to be appointed for this project. CV submitted must be signed by the respective owners and should be relevant for this bid (not general). Copies of qualifications should be certified by authorized entities.

The proposed personnel to be made available for the contract by the successful bidder shall have the following minimum qualifications and experience.

Contract Manager:

- Company representative or owner and has the authority to sign anything related to the contract
- Must have at least grade 12 certificate and is a holder of at least a tertiary level certificate in any industry.
- Minimum 6 years, experience in Construction industry

Site Agent:

- Civil Engineering Diploma or equivalent with
- 5 years, experienced as a Contractor's site agent in construction related fields

General Foreman:

- Must have at least grade 12 certificate and is a holder of at least a certificate in Urban Reticulation services obtained from recognized training institution.
- 8 years, experienced in construction related fields

Land Surveyor:

- 4 Years' experience in land surveying.
- National Diploma in surveying

In the given table under clause 1.5 in section IV, qualification information, the bidder shall state the number of each category of personnel to be provided on site for the execution of the work and in the case of professional and technical staff the number of years of suitable experience after qualification.

ITB 6.3 (e)

The minimum amount of liquid assets and/or credit facilities net of other contractual commitments of the successful Bidder shall be:

20% percent of the quoted contract price

NB: Bidders should provide proof from their respective banks confirming availability of funds or access to a loan facility.

B. Bidding Documents				
ITB 8.1	The Public Entity's address for clarification is: The secretary The procurement Management Unit Private Bag 5019, Swakopmund Namibia Tel: +264 64 410 5700 Fax: +264 64 410 5701 Email: mgomes@erongorc.gov.na Attention: Monalisa Gomes			
ITB 9.2	A pre-bid clarification meeting will be held. Such meeting has been scheduled for: Date: 24 June 2025 at 11h00, Uis Settlement Office. The pre-bid meeting is not compulsory; however, bidders who attend the meeting will be given 5 points towards their evaluation.			
	C. Preparation of Bids			
ITB 13.1(e)	Any additional materials required to be completed and submitted by the Bidders Are <i>None</i> .			
ITB 14.1	The bid submission form (or Letter of Bid), schedules and all documents listed und ITB 13.1 shall be prepared using the relevant forms and/or by submitting the require documentation as follows, failure of which will lead to automatic disqualification:			
	(i) The bidding document must remain intact and no portion of the document material be detached			
	(ii) All certificates, schedule and form included in the bid must be completed in black ink and signed by authorized signatory.			
	(iii) Alteration to information or figures already entered must be effected by crossing out the correct information, entering the correct information alongside the amendment, and initialling thereof by the authorized signatory.			
	(iv) The bid is to be submitted in the format of the bidding forms bound into section IV of the bidding document			
	(v) All tender prices, rates and amounts are to be entered into the appropriate bill of quantities included in section IV part D of the bidding documents.			
	(vi) In compliance with ITB 20.1 (VI) of the bidding data sheet (BDS) bidders must complete section IV part B1 "bid securing declaration" by hand. The bid securing declaration must be initialled, signed and stamped by the person duly authorized to sign on behalf of the bidder in front of witness.			

	(vii) Section VIII: contract agreement and performance security: when submitting the bid these documents need to be left blank (bidders are requested to initial at the bottom of the pages).	
	(viii) The bidders shall submit formal evidence (by way of a separate authorization letter) that the signatory is authorized to sign the bid including letter of bid (in section iv part A) and all other pages of the bidding documents that need to be signed and or initialled.	
ITB 17.1	The Contract is not subject to price adjustment in accordance with GCC Clause 44.	
ITB 17.2	Material to be paid according to the project progress.	
ITB 18.1	Bidders shall provide all information regarding the equipment and personnel to be used to carry out the works and any other information as required in the bidding forms (section IV), in sufficient details to demonstrate the adequacy of the bidders' proposal to meet the work requirements and the completion time.	
	Information supplied in the bidding forms (section IV) shall be used in the evaluation of the bid with regards to:	
	1. Capacity of the bidder to execute the works satisfactory. Consideration shall be given to equipment owned/secured by the bidder, as well as experience and qualified personnel in his employ.	
	2. Schedule of works satisfactorily completed by the bidder. Such information provided by the bidder shall be evaluated in order to establish whether the bidder has sufficient experience, specifically in work of similar nature, complexity and values as the works defined in this bidding document.	
	3. Proof that the bidder has fulfilled his past commitments with regards to time and quality	
ITB 19.1	The Bid shall be valid for <i>180 days</i> after the deadline set for the submission of bid, the deadline being counted as day one of the validity period.	
ITB 20.1	No Bid Security is required, the bid securing declaration form to be completed by hand, signed and stamped instead.	
	D. Submission and Opening of Bids	
ITB 21.1	In addition to the original of the bid, the number of copies is: <i>One</i> (1)	
ITB 23.1	The deadline for submission of bids shall be 15 July 2025.	
ITB 23.1	The Employer's address for the purpose of Bid submission is:	
	Erongo Regional Council Offices Acacia Building Tobias Hainyeko Street Swakopmund	

ITB 26.1	Attention: The Secretary Procurement Management Unit Erongo Regional Council Private Bag 5019, Swakopmund The bid opening shall take place at: The Council Chamber Erongo Regional Council offices Swakopmund Date: 15 July 2025 at 10h00
	E. Evaluation and Comparison of Bids
ITB 29.2	A substantially responsive bid is one, which conforms to the terms, conditions and specifications of the bidding documents without material deviation, reservation, qualification or omission. A material deviation or qualification is one which, in the opinion of the Erongo
	Regional Council;
	 Could detrimentally affect the scope, quality or performance of the works. Changes the employers or the contractors risk and responsibilities under the contact; or Would affect the competitive position of other tenderer presenting responsive
	tenders, it were to be rectified.
	Hence, only substantially responsive bids will be considered for further technical and financial evaluation as per the set evaluation criteria.
ITB 32.1	A margin of preference shall not apply.
	Please refer to section III – evaluation criteria of the bidding document for details.
ITB 33.2	To evaluate a bid, the employer shall apply the evaluation procedure specified in ITB 33.1 for each compliant bidder with respect to methodology specified in section III – evaluation
	(a) Bid prices shall be adjusted for arithmetic errors in terms of clause ITB 31.
	(b) Tender rates and bid prices will be evaluated against reasonable standard benchmark rates.
	Bidders whose tender amount varies by more than 10% (up or down) from the respective standard benchmark tender amount shall be deemed to be non-responsive and shall be rejected.
ITB 35	The employer shall determine its satisfaction whether the bidder that is recommended in accordance with ITB 33 meets the qualifying criteria.

F. Award of Contract				
ITB 40.1	The Standard Form of Performance Security acceptable to the Public Entity shall be "a Bank Guarantee". The Bank guarantee shall be 10% of the contract price inclusive of provisional and contingencies sum and VAT.			
ITB 41.1	No Advance Payment shall be paid to contractor			
ITB 42.1	Material to be paid according to the project progress.			

Section III - Evaluation Criteria

This section contains supplementary criteria that the Employer shall use to evaluate bids.

1. Evaluation

In addition to the criteria listed in ITB 32.1 and ITB 33.2 of section II "bidding data sheet", (BDS) the following margin of preference and evaluation criteria shall apply:

(a) Bid Validity and Compliance

Received Bidds will be examined to determine whether or not they substantively comply with the requirments of the Bid Documents. A substantively complying Bid is one which complies with the rules, terms and conditions of the Bid Documents, without any material deviation in the sole opinion of the Employer. A non-complying bid will be rejected and may not subsequently be altered to comply by correction of any non-conformity.

The Employer's determination of a bid's responsiveness will be based on the required contents as defined in ITB13 of the bid document.

Bids will secondly be examined to determine whether they have been submitted by well-established contractors with the necessary experience and the financial, human and material resources to satisfactorily execute the Contract. For this purpose the various forms and other information required under Section IV (*Qualification Information*) of the bid document will be utilised. Bidders are at liberty to submit with their bid any other information which they consider would be relevant to the bid evaluation.

N.B. It's the resposibility of the bidder to make sure that the bid response document is clear, logical and well structured. Erongo Regional Council will not take responsibility of any missing information or incomplte document.

(b) Adequacy of Technical Proposal

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section V (Employer's Requirements).

The Employer will examine the technical aspects of the bid submitted in accordance with ITB 18, Technical Proposal, in particular, to confirm that all requirements of Employer's Requirements have been met without any material deviation, reservation or omission.

The typical evaluation scorecard presented in a table below will be used for the technical evaluation of bids and the selected evaluation criteria are intended to assess the competency of the bidder to achieve the required project outcome and are used to rate each of the bidders.

The required data and substantiating documentation are as per Section IV (Qualification Information Clauses 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.11 and 2.1) will be used for

evaluation. Technical scores will be calculated in accordance with the following formula and only bidders with a total technical score of *at least 80%* will be considered for financial evaluation:

$$TS = (T_B + T_F + T_x + T_C + T_M + T_N + T_D + T_A + T_P)$$

ITEM	Non-Price Attributes	Max Points	Bidding	Clauses In
			Forms	Sec I: ITB &
	Technical/Capacity/ Attributes			Sec II: BDS
T_{B}	Technical Capacity:	7 (Min	All bid	All bid
		Points	Sections	Sections
		required 3)		
	Complete Technical Proposal:			ITB18.1
		_		ITB18.1
	Company Profile,	3		
	Construction Program	4		ITB6.1
T _F	Financial Resources/ Capacity	14 (Min	Section IV	
		points 7)		
	Three years company financial	3		ITB6.3(a)
	statements	_		ITB6.3(a), (e)
	Average annual turnover	3		ITB6.2(g)
				ITB13.1(f)
	Banking Rating (C or better)	3		
	B 6 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	_		
	Proof of financial availability	5		
	amounting to N\$ 1, 200, 000.00	20 (3.5)	G .: TT.	
T_X	Relevant Experience	20 (Min	Section IV	
		Points		
	*0 11 0	required 10)		ITD 10 1
	*Overall Company experience	_		ITB18.1
	(if no. of years; $0 - 3 = 0$, if $4 - 5$	5		ITB6.3 (b)
	= 2.5, if 6+= 5 points)			ITB6.2(c)
	Cananal Basismal Experience in	5		
	General Regional Experience in Erongo (No. of projects carried	3		
	out in the region in general; 0-2			
	=0, if 3+=5 points)			
	=0, if 3+ = 3 points)			
	References/ Ratings by client	10		
	*(No. of projects of similar nature;	10		
	0-4=0, if $5+=10$ points)			
T _C	Relevant competence: staff	29 (min	Section IV	
		Points		
		required 15)		
	* Contract Manager (if with a	<u>1</u>		ITB6.2(e)
	tertiary level certificate and 6+	10		` ,
	years' Experience = 10 , if not = 0)			ITB6.3(d)
	*Site agents (if with a Diploma			ITB6.3(d)
	and 5 years' Experience = 10, if	10		, ,
	not = 0			ITB6.3(d)

	*General Foreman (if with relevant tertiary level certificate and min. 8 years' experience in construction of Urban reticulation) = 5, if not = 0)	5		ITB6.2(e)
	* Land Surveyor (if with a Diploma and 4 years' Experience = 4, if not = 0)	4		
T_{M}	Mechanical plant capacity	10	Section IV	
	 As per BDS ITB 6.3(c) with proof of ownership/lease agreement. Hard rock excavation equipment/heavy duty excavator/Hard rock blasting specialist agreement Hauling Equipment (Tipper Trucks) Compaction Equipment 	5 3 2		ITB6.3(c) ITB6.2(e)
	- Compaction Equipment			
T _N	Namibian content status - Namibian supplier: compliance with definition S/clause (d) 1. if 100% Namibian = 5, if 50% Namibian = 2.5, if 0% Namibian = 0	5	Section IV	ITB6.2(a)
T_D	SME status - Registration	5	Section IV	ITB13.1(f)
T _A	Attendance of bid clarification meeting	5	Section IV	ITB 9.2
T _P	PDN status: compliance with definition of S/clause 13.1(d) - % Ownership of PDN, e.g. points if 100% PDN = 5, if 50% PDN = 2.5, if 0% PDN = 0	5	Section IV	ITB13.1(d)
Ts	Technical scores	100		

(c) Financial Proposal

The price is the sum that the client would be required to pay to the tenderer for the work or service provided. This must include all costs over the duration of the contract. Depending on the contract, this could include:

- fixed capital cost;
- time related costs during the contract period;
- special adjustments during the contract period;

- maintenance costs; and
- Operating costs.

Price score will be calculated as follows:

- $PS = (PL/PN) \times 100$
- Where:

 P_L = tender price of the lowest acceptable tender

 P_N = tender price under consideration

Please note that the value of fixed P&G's may not be more than 8% of the total contract value (excluding contingencies and VAT) and the total P&G's (fixed + time related) may not be more than 15% of the total contract value (including contingencies and VAT). Should the bidder exceed this limit in his financial offer, the Employer reserves the right to consider these bid amounts to be unbalanced and request justification.

Bid Index (BI)

The Bid Index (BI) is the final evaluated result of each Bidder as per the specified and approved weight of financial and technical evaluations.

$BI = a \times PS + b \times TS$

Where:

 P_S = Price score

 T_S = Technical score

"a" is allocated weight for price score (PS) and 'b" is the allocated weight for Technical Score (TS).

For this project the selected bid index weighting will be 60% for the technical score and 40% for financial score:

$$BI = 0.4 \times P_S + 0.6 \times T_S$$

The bid shall be awared to the bidder with the highest Bid Index that is substantailly compliant and responsive to all stages of the evaluation.

(d) Multiple Contracts

Pursuant sub-clause 1.1 of the Instructions to Bidders, if Works are grouped in multiple contracts, evaluation will be as follows: - N/a

(e) Completion Time

No alternative Completion time is allowed. Any completion after the specified completion will be interpreted as follows:

N\$ 2,500.00 per calendar day in line with SCC item no. GCC 46.1 for late completion will be applied unless authorized to waive by the Employer through a successful and timeous submission of a request to extend the contract period.

WRITTEN ACKNOWLEDGEMENT AND ACCEPTANCE

The Bidder must complete the below form in full to acknowledge and accept the employer's specific requirements and evaluation criteria for this project.

	Date:[Day/month/year]	••		
	Procurement Ref No.:	•		
V	e, the undersigned, declare that we acknowledge and accept			
a)	That according to ITB 29, the responsiveness of the bid will be determined base on the contents and requirements of the SBD as defined in ITB13.	d		
b)	That all the required technical information and requirements must be met for our bid to be responsive.			
c)	e) For our Bid to be determined responsive, our Bid must score at least 80% on technical evaluation as per the set criteria.			
d)) That the bid will be deemed to be non-responsive if;			
-	The Bid Price is 10 % above or below the estimated project cost			
-	The value of the fixed P&G's exceeds 8% of the total contract value (excluding contingencies and VAT)			
-	The total P&G's (fixed + time related) exceeds 15% of the total contract value (including contingencies and VAT).			
	Name:			
I	the capacity of:			
	Signed:			
	ly authorized to the Bid for and on behalf of:			
	Date:			
;	eal of Company			

Section IV - Bidding Forms

Table of Forms

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CERTIFICATE OF PRE-BID CLARIFICATION MEETING

This is to certify that I,	
Representative of (tender	
Accompanied by (Employer's Representative)	
Visited the Site on (date)	
Having previously studied the contract documents	, I carefully examined the site.
I have made myself familiar with all local condition	ns likely to influence the work and the cost thereof
	ription of the work and explanations given by the larger perfectly the work to be done, as specified and
	SIGNATURE OF TENDERER
DATE:	
	SIGNATURE OF EMPLOYER'S REPRESENTATIVE
SIGNATURE OF PROJECT MANAGER	(Project Manager's Seal)

Bid Submission Form

	Date:
	Bidder's Reference No.:
	Procurement Reference No:
То:	Erongo Regional Council
We, t	he undersigned, declare that:
(a)	We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) Clause 10;
(b)	We offer to execute in conformity with the Bidding Documents the following Works:
	;
(c)	The total price of our Bid after discounts, if any, offered in item (d) below is:
	:
(d)	The discounts offered and the methodology for their application are:
	·
(e)	Our bid shall be valid for a period of 180 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
(f)	We hereby confirm that we have read and understood the content of the Bid Securing Declaration attached hereto and subscribe fully to the terms and conditions contained therein, if required. We understand that non-compliance to the conditions mentioned may lead to disqualification.
(g)	If our bid is accepted, we commit to obtain a Performance Security and a Preference Security (if applicable) in accordance with the Bidding Document;
(h)	We, including any subcontractors or suppliers for any part of the contract, do not have any

conflict of interest in accordance with ITB 5.2;

- We are not participating, as a Bidder in more than one bid in this bidding process other than (i) alternative offers submitted in accordance with ITB 15;
- Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part (j) of the contract, has not been declared ineligible under the laws of Namibia;
- (k) We are not a government owned entity / We are a government owned entity but meet the requirements of ITB 5.4;6
- (1) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed:
- that

	r - r	" · · · · · ·				
(m)	We understand that you are not bound to accept the lowest evaluated bid or any other you may receive; and					
(n)	If awarded the con	tract, the person named below shall act as Contractor's Representative:				
	Name:					
	In the capacity of:					
	Signed:					
Dul	y authorized to sign the Bid for and on behalf of:					
	Date:					
	Seal of Company					

Appendix to Bid Submission Form

BID SECURING DECLARATION

(Section 45 of Act) (Regulation 37(1) (b) and 37(5))

Date:[Day/month/year]
Procurement Ref No.:
To: Erongo Regional Council, Private Bag 5019, Swakopmund, Namibia
I/We* understand that in terms of section 45 of the Act a public entity must include in the bidding document the requirement for a declaration as an alternative form of bid security.
I/We* accept that under section 45 of the Act, I/we* may be suspended or disqualified in the event of
(a) a modification or withdrawal of a bid after the deadline for submission of bids during the period of validity;
(b) refusal by a bidder to accept a correction of an error appearing on the face of a bid;
(c) failure to sign a procurement contract in accordance with the terms and conditions set forth in the bidding document, should I/We* be successful bidder; or
(d) failure to provide security for the performance of the procurement contract if required to do so by the bidding document.
I/We* understand this bid securing declaration ceases to be valid if I am/We are* not the successful Bidder
Signed:
Capacity of:
Name:
Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]
Dated on,,
Corporate Seal (where appropriate)
[Note*: In case of a joint venture, the bid securing declaration must be in the name of all partners to the joint venture that submits the bid.]



Republic of Namibia

Ministry of Labour, Industrial Relations and Employment Creation

Written undertaking in terms of section 138 of the Labour Act, 2015 and section 50(2) (D) of the Public Procurement Act, 2015

1. EMPLOYERS DETAILS

Company Trade Name:
Registration Number:
Vat Number:
Industry/Sector:
Place of Business:
Physical Address:
Tell No.:
Fax No.:
Email Address:
Postal Address:
Full name of Owner/Accounting Officer:
Email Address:

2. PROCUREMENT DETAILS

Procurement Reference No.:
Procurement Description:
Anticipated Contract Duration:
Location where work will be done, good/services will be delivered:
3. UNDERTAKING
I owner/representative
of
hereby undertake in writing that my company will at all relevant times comply fully with the relevant provisions of the Labour Act and the Terms and Conditions of Collective Agreements as applicable.
I am fully aware that failure to abide to such shall lead to the action as stipulated in section 138 of the labour Act, 2007, which include but not limited to the cancellation of the contract/licence/grant/permit or concession.
Signature:
Date:
Seal:

Please take note:

- 1. A labour inspector may conduct unannounced inspections to assess the level of compliance
- 2. This undertaking must be displayed at the workplace where it will be readily accessible and visible by the employees rendering service(s) in relations to the goods and services being procured under this contract.

Qualification Information

[The information to be filled in by **bidders** in the following pages shall be used for purposes of post-qualification or for verification of prequalification as provided for in ITB Clause 6. This information shall not be incorporated in the Contract. **Attach additional pages as necessary**. Pertinent sections of attached documents should be translated into English. If used for prequalification verification, the Bidder should fill in updated information only.]

1.	Individual	1.1	Constitution or legal status of Bidder: [attach copy]
	Bidders or Individual		Place of registration:
	Members of Joint Ventures		Principal place of business:
			Evidence of <i>signatory authorized</i> to sign the bid (if applicable): [attach proof]
		1.2	Annual amounts of construction works performed during the last 3 years N\$ 3 Million per annum (attach proof –references/completion certificates)

1.3 Number of *works of a nature and amount similar* to the Works performed as prime Contractor over the last Five years. (attach proof- references/completion certificates)

Project/Contract name and country	Name of client and contact person	Type of work performed	Year of Completion	Value of contract in NAD
(a)				
(b)				
(c)				
(d)				
(e)				

1.4 Major items of Contractor's Equipment proposed for carrying out the Works [List all information requested below. Refer also to ITB Sub-Clause 6.3 (c).] (attach prooflease agreement/natis registration)

Item of equipment	Description, make, and age (years)	Condition (new, good, poor)	Number available	Owned (Provide proof of registration from Natis)	Leased (Provide signed lease agreement)	Purchased (from whom?), or to be purchased (from whom?)
(a)						
(b)						
(c)						
(d)						
(e)						
(f)						
(g)						
(h)						
(i)						

1.5 Qualifications and experience of key personnel proposed for administration and execution of the Contract. [Attach biographical data & proof of qualifications. Refer to ITB Sub-Clause 6.3 (d)]

Position	Name	Years of experience (general)	Years of experience in proposed position
(a)			
(b)			
(c)			
(d)			
(e)			

1.6 Proposed subcontracts and firms involved. Refer to General Conditions of Contract Clause 7.

Sections of the Works	Value of subcontract	Subcontractor (name and address)	Experience in similar work
(a)			
(b)			
(c)			

- 1.7 Financial reports for the last 3 years: Financial Statements, Audited Accounts, etc.
- 1.8 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List below and attach copies of support documents.
- 1.9 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contacted by the Public Entity
- 1.10 Information on current litigation(s) in which the Bidder is involved

Other party(ies)	Cause of dispute	Amount involved
(a)		
(b)		
(c)		

- 1.11 Proposed Program (work method and schedule). Descriptions, drawings, and charts, as necessary, to comply with the requirements of the Bidding Documents.
- 1.12 A Bidder MUST submit proof of financial availability amounting to N\$ 1,200, 000.00 from a recognised and accredited Financial Institution in Namibia.
- 2. Additional Requirements
- 2.1 Bidders should provide any additional information requested in the Bidding Document.

Bill of Quantities

PRE-AMBLE TO THE SCHEDULE OF QUANTITIES

(a) For the purpose of this Schedule of Quantities the following words shall have the meanings hereby assigned to them:

Payment Item: This number refers to the relevant clause in the specification that

describes the item

Item No: This number is for reference only

Description: The description clarifies what the item is for

Unit: The unit of measurement for each item of work as defined in the standard

specifications or the special provisions of contract

Quantity: The number of units of work for each item

Rate: Payment per unit of work or material at which tenders offer to do the

work or supply material

Amount: The product of quantity and rate

Lump sum: A price tendered for an item, the extent of which is described in the

schedule of quantities, the specifications or elsewhere but of which the

quantity of work is not measured in any units.

(b) This schedule of quantities forms part of the contract and shall be read in conjunction with all the other documents comprising the con-tract documents.

(c) The quantities set out in the schedule of quantities are approximate only and the quantities of work finally accepted and certified for payment, and not the quantities given in the schedule of quantities, shall be used for determining payments to the electrical contractor.

The validity of the contract shall in no way be affected by differences between the quantities in the schedule of quantities and the quantities finally certified for payment. Work shall be valued at the rate or lump sum prices tendered, subject only to the provisions of the general conditions of contract and the provisions of paragraphs (k) and (l) of this preamble.

- (d) Rates and lump sum prices shall include full compensation for over-heads, profits, incidentals, etc., and for the completed items of work as specified. Full compensation for completing, and maintaining during the maintenance period, all the work shown on the drawings and specified in the project specifications and for all the risks, obligations and responsibilities specified in the tender rules, general conditions of contract, special conditions of contract and project specifications shall be considered as provided for collectively in the items of payment given in the schedule of quantities, except in so far as the quantities given in the schedule of quantities are only approximate.
- (e) The tenderer must fill in a rate or lump sum to each item where pro-vision is made for it, even where no quantities are given. Items against which no rate or lump sum has been

entered in the tender will not be paid for when executed, as payment for such work will be regarded as covered by other rates or lump sums in the schedule of quantities.

The tenderer must fill in a rate opposite all items where the words "rate only" appear in the "Price" column. The intention is that al-though no work is foreseen under such an item, and no quantities are accordingly given in the "Quantity" column, the tendered rate shall apply in the event of work under this item being actually required. The attention of the tenderers is directed to the provisions of paragraph (1) of this preamble.

If the tenderer should group a number of items together and tender one lump sum for such group of items the single tendered lump sum shall apply to that group of items and not to each individual item, or should he indicate against any item that full compensation for such item has been included in another item, the rate for the item included in another item shall be deemed to be nil.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during the execution of the contract.

- (f) The works as executed will be measured for payment in accordance with the methods described in the contract documents under the various payment items, notwithstanding any custom to the contrary. Except where otherwise specified, the net measurements or mass of the finished work in place shall be taken for payment but excluding any volume or mass of work in excess of that ordered.
- (g) The quantities of work or material stated in the schedule of quantities shall not be considered as restricting or extending the amount of work to be done or quantity of material to be supplied by the Contractor.
- (h) The quantities of material or work stated in the schedule of quantities shall not be regarded as authorization for the Contractor to order material or to execute work. The Contractor shall obtain the Engineer's detailed instructions for all work before ordering any materials for or executing work or making arrangements in this regard.
- (i) The short descriptions given of payment items in the schedule of quantities are only for the purposes of identifying the items and providing specific details. Reference shall be made, inter alia, to the drawings, project specifications, general conditions of contract and special conditions of contract for more detailed information regarding the extent of the work entailed under each item.
- (j) Reference shall be made to the general conditions of contract regarding provisional sums.
- (k) Civil Contract Volume 1: Subject to the conditions stated in paragraph (l) below, the rates and lump sums filled in by the tenderer in the schedule of quantities shall be final and binding and may not be adjusted should there be mistakes in the extensions thereof. Should there be any discrepancies between the correctly extended and totalled schedule of quantities and the tender sum, the employer shall have the right to make such adjustments to the tender sum as he may deem necessary in order to reconcile the total of the schedule of quantities with the tender sum. In their own interest tenderers should make doubly sure of the correctness of their tendered rates, the extensions and the tender sum.

Building Contract Volume 2: The Employer reserves the right without prior consent from the Tenderer, to correct any arithmetical or other errors in the extension of the rates and totals in the tender and / or to adjust any rates that are considered by him to be imbalanced and unacceptable. Such adjustments will be done without affecting the Tender Sum.

- (l) A tender may be rejected if the unit rates or prices for some of the items in the schedule of quantities are, in the opinion of the employer, unreasonable or out of proportion, and the tenderer fails, within a period of seven (7) days after having been notified in writing by the employer to adjust the unit rates or prices of such items, to make such adjustments.
- (m) The units of measurement indicated in the schedule of quantities are metric units. Abbreviations used in the schedule of quantities are as follows:

mm = millimeter

m = meter

km = kilometer

 m^2 = square meter

 m^3 = cubic meter

P.C. sum = Prime cost sum

Prov. Sum = Provisional sum

- (n) All rates and sums of money quoted in the schedule of quantities must be in Namibian dollar.
- (o) The item numbers appearing in the schedule of quantities refer to the corresponding item numbers in the specifications.
- (p) The Contractor's rates and amounts shall include all sales duties on all items to which they apply. VAT shall be excluded from the rates and shall be reflected as a separate item on the summary of the schedule of quantities.

BILL OF QUANTITIES



CONSTRUCTION OF BULK WATER SUPPLY IN UIS SETTLEMENT AREA, ERONGO REGION

			T
			∐
PART 1: PRELIMINARLY & GENER	AL	N\$:
PART 2: UPTOWN WATER SUPPLY		N\$:
PART 3: DOWNTOWN WATER SUP	PLY	N\$:	
SUB - TOTAL EXCLUDING CON	TINGENCIES	N\$:
ADD 10% CONTINGENCIES		N\$:
SUB - TOTAL INCLUDING CON	TINGENCIES	N\$:
ADD 15% VAT		N\$	[:]
TOTAL CONTRACT AMOU	NT (VAT INCL.)	N\$	<u> </u>

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		PART 1: PRELIMINARY & GENERAL				
		SABS 1200 A: PRELIMINARY AND GENERAL				
1	8.3	SCHEDULED FIXED-CHARGES AND VALUE				
		RELATED ITEMS				
1.1	8.3.1	Contractual Dequirements	Cum	1		
1.1		Contractual Requirements	Sum	1		
1.2	8.3.2	Establishment of Facilities on the Site:				
1.2	8.3.2.1	Facilities for the Contractor	Sum	1		
1.2.1		a) Site Offices and storage area	sum	1		
1.2.2		b) Workshops	Sum	1		
1.2.3		c) Laboratory	sum	1		
1.2.4		d) Ablution and latrine facilities	sum	1		
1.2.5		e) Tools and equipment		1		
1.2.6		f) Water, electrical & communications facilities	sum	1		
1.3	8.3.4	Removal of Site Establishment on completion	sum	1		
1.4		Contract sign board	sum	1		
2	8.4	SCHEDULED TIME-RELATED CHARGES ITEMS				
		FOR THE DURATION OF THE PROJECT				
2.1	8.4.1	Contractual requirements	Sum	1		
2.2	8.4.2	Operation and Maintenance of Facilities on Site for the	Juni	-		
2.2	0.1.2	duration of Construction:				
	8.4.2.1	Facilities required by contractor				
2.2.1	0.4.2.1	a) Offices and storage sheds	Sum	1		
2.2.2		b) Workshops	Sum	1		Rate Only
2.2.2						Rate Only Rate Only
		c) Laboratory	Sum	1		Rate Offiy
2.2.4		d) Ablution facilities	Sum	1		
2.2.5		e) Tools and equipment	Sum	1		
2.2.6	0.45	f) water, electrical & communication facilities	Sum	1		
2.3	8.4.3	Supervision for Duration of Construction	Sum	1		
CARRI	ED FO	 RWARD				

50

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROU	GHT FO	DRWARD				
3	8.6	PRIME COST SUMS				
3.1		Additional tests required by the Engineer	P. Sum	1	16,000.00	16,000.00
3.2		Charge required on item (3.1) above:	%	16,000	15.00%	2,400.00
		. , ,		•		ŕ
4	8.8.2	Accomodation of Traffic	sum	1		
5	8.8.4	LOCATION AND PROTECTING OF EXISTING				
		SERVICES				
5.1		Provision of detecting services for:				
5.1.1		a) Water and sewer pipes	Sum	1		
5.2		Hand excavation necessary for locating and exposing				
		existing services in all material:				
5.2.1		a) In Roadways	m ³	30		
5.2.2		b) In all other areas	m ³	50		
5.2.3		Identification of enchroached manholes and rectfication	No.			Rate Only
		to marge with the new road levels				
5.3		Relocation of existing water services				
5.3.1		a) Water valve box structures	No.			Rate Only
5.3.2		b) Water fire hydrant structures	No.			Rate Only
5.3.3		c) Water reticulation line(includes relocation to the new	m	25		
		position, excavating, installing & backfilling and finalizing)				
CARRI	ED FO	RWARD				18,400.00

SCHEDULE OF QUANTITIES PART 1: PRELIMINARY AND GENERAL

AYWORKS Labourer Charges (a) Foreman (b) Artisan (c) Surveyor (d) Surveyor Assistant (e) Driver - LDV (f) Driver - Heavy motor vehicle (g) Operator (h) Chargehand (i) Labourer - skilled	h h h h h		Rate Only
Labourer Charges (a) Foreman (b) Artisan (c) Surveyor (d) Surveyor Assistant (e) Driver - LDV (f) Driver - Heavy motor vehicle (g) Operator (h) Chargehand	h h h h		Rate Only Rate Only Rate Only Rate Only
Labourer Charges (a) Foreman (b) Artisan (c) Surveyor (d) Surveyor Assistant (e) Driver - LDV (f) Driver - Heavy motor vehicle (g) Operator (h) Chargehand	h h h h		Rate Only Rate Only Rate Only Rate Only
 (a) Foreman (b) Artisan (c) Surveyor (d) Surveyor Assistant (e) Driver - LDV (f) Driver - Heavy motor vehicle (g) Operator (h) Chargehand 	h h h h		Rate Only Rate Only Rate Only Rate Only
 (a) Foreman (b) Artisan (c) Surveyor (d) Surveyor Assistant (e) Driver - LDV (f) Driver - Heavy motor vehicle (g) Operator (h) Chargehand 	h h h h		Rate Only Rate Only Rate Only Rate Only
(b) Artisan (c) Surveyor (d) Surveyor Assistant (e) Driver - LDV (f) Driver - Heavy motor vehicle (g) Operator (h) Chargehand	h h h h		Rate Only Rate Only Rate Only Rate Only
(c) Surveyor (d) Surveyor Assistant (e) Driver - LDV (f) Driver - Heavy motor vehicle (g) Operator (h) Chargehand	h h h h		Rate Only Rate Only Rate Only
(d) Surveyor Assistant (e) Driver - LDV (f) Driver - Heavy motor vehicle (g) Operator (h) Chargehand	h h h		Rate Only
(e) Driver - LDV (f) Driver - Heavy motor vehicle (g) Operator (h) Chargehand	h h h		Rate Only
(f) Driver - Heavy motor vehicle(g) Operator(h) Chargehand	h h		
(g) Operator (h) Chargehand	h		Rate Only
(h) Chargehand			
	h		Rate Only
(i) Labourer - skilled			Rate Only
	h		Rate Only
(j) Labourer - semi skilled	h		Rate Only
(k) Labourer - unskilled	h		Rate Only
Plant Charges			
	h		Rate Only
	h		Rate Only
(c) 10m³ Tipper truck	h		Rate Onl
(d) Front-end-loader	h		Rate Only
	h		Rate Only
	h		Rate Only
	l h		Rate Only
			Rate Only
(1) 7 th compressor	"		rate on
	(a) Backhoe CAT 428 or similar(b) Excavator CAT 325 or similar	(a) Backhoe CAT 428 or similar (b) Excavator CAT 325 or similar (c) 10m³ Tipper truck (d) Front-end-loader (e) 1m³ Concrete mixing plant (f) Bulldozer CAT D9 or similar (g) Motor grader (h) Vibratory roller compactor (i) 14,000l Water Truck (j) Survey equipment (k) Centrifugal water pump or equivalent	(a) Backhoe CAT 428 or similar (b) Excavator CAT 325 or similar (c) 10m³ Tipper truck (d) Front-end-loader (e) 1m³ Concrete mixing plant (f) Bulldozer CAT D9 or similar (g) Motor grader (h) Vibratory roller compactor (i) 14,000l Water Truck (j) Survey equipment (k) Centrifugal water pump or equivalent

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		PART 2: UPTOWN WATER SUPPLY PIPELINE				
		SECTION 2.1: SITE CLEARANCE				
		SANS 1200 C: SITE CLEARANCE				
2.1.1	8.2.1	CLEAR AND GRUB				
2.1.1.1		Clear and grub Strips for water pipeline of 3m wide	ha	0.31		
2.1.2	8.2.2	REMOVE AND GRUB LARGE TREES AND TR STUMPS OF GIRTH:	EE			
2.1.2.1		Over 1 m and up to and including 2 m	No.			Rate Only
2.1.2.2		Over 2 m and up to and including 3 m	No.			Rate Only
		SECTION 2.2: EARTHWORK				
		SANS 1200 DB: EARTHWORKS				
		(PIPE TRENCHES)				
2.2.1	8.3.2	EXCAVATION				
2.2.1.1	(a)	EXCAVATE IN ALL MATERIALS FOR				
		TRENCHES, BACKFILL, COMPACT AND				
		DISPOSE OF SURPLUS MATERIAL FOR:				
		Main Lines:				
2.2.1.1.2		Up to 160 mm diam. for total trench depth:				
		Soft excavation Exceeding 0,5 m but not 1,3 m	m³	629		
		as per item 3.1.2 a) in SANS 1200DA				
2.2.1.2	(b)	EXTRA-OVER FOR ITEM 8.3.2 (a) ABOVE				
		FOR:				
2.2.1.2.1		Extra Over for intermediate Excavation as per	m³	262		
		item 3.1.2 b) in SANS 1200DA				
2.2.1.2.2		Extra Over for Hard Rock Excavation as per	m³	839		
CARRIE	D FORV	WARD				

BROUG	HT FOR	WARD			_	
2.2.1.3	(6)	DISPOSE OF UNSUITABLE MATERIAL FR	 			
2.2.1.3	(c)	TRENCH BOTTOM	ОМ 			
		TRENCH BOTTOM				
2.2.1.3.1		Dispose of unsuitable material from trench bottom	m ³			Rate Only
2.2.2	8.3.3	EXCAVATION ANCILLARIES				
	8.3.3.1	MAKE UP DEFICIENCY IN BACKFILL				
		MATERIAL (PROVISIONAL)				
2.2.2.1	(a)	from other necessary excavations on site	m³			Rate Only
2.2.2.2	(b)	by importation from designated borrow pits	m ³			Rate Only
2.2.2.3	(c)	by importation from commercial or off-site sources	m ³	524		
		selected by the contractor				
		SECTION 2.3: MEDIUM PRESSURE PIPELINES				
		SANS 1200 L: MEDIUM PRESSURE PIPELI	 NES 			
2.3.1	8.2.1	SUPPLY, LAY AND BED PIPES COMPLETE				
		WITH COUPLINGS				
2.3.1.1		uPVC pipes Class 9: Supply, handle, lay,				
		and bed, joint , test, and disinfect				
		(potable water pipeline)				
2.3.1.1.1		160 mm Ø	m	1,049		
2.3.1.1.2		110 mm Ø	m			Rate Only
2.3.1.1.3		75 mm Ø	m			Rate Only
CARRIE	D FORV	VARD	1			

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGH	IT FOR	WARD	•		•	
2.3.2	8.2.2	EXTRA OVER 8.2.1 FOR SUPPLYING, LAYING AND BEDDING OF SPECIALS COMPLETE WITH COUPLINGS Supply, lay, and bed Class 9 joint, incl. cut				
		pipes to length where required,				
		test and disinfect:				
2.3.2.1		uPVC Pressure Bends				
2.3.2.1.1		160 mm Ø, 11.25°	No			Rate Only
2.3.2.1.2		160 mm Ø, 22.5°	No	26		
2.3.2.1.3		160 mm Ø, 45°	No	6		
2.3.2.1.4		160 mm Ø, 90°	No	4		
2.3.2.1.5		110 mm Ø, 11.25°	No			Rate Only
2.3.2.1.6		110 mm Ø, 22.5°	No			Rate Only
2.3.2.1.7		110 mm Ø, 45°	No			Rate Only
2.3.2.1.8		110 mm Ø, 90°	No			Rate Only
2.3.2.1.9		75 mm Ø, 11.25°	No			Rate Only
2.3.2.1.10		75 mm Ø, 22.5°	No			Rate Only
2.3.2.1.11		75 mm Ø, 45°	No			Rate Only
2.3.2.1.12		75 mm Ø, 90°	No			Rate Only
2.3.2.2		Cast Iron Equal Tees				
2.3.2.2.1		75 mm Ø Equal Tee	No	2		
2.3.2.2.2		110 mm Ø Equal Tee	No			Rate Only
2.3.2.2.3		160 mm Ø Equal Tee	No			Rate Only
2.3.2.3		Cast Iron Reducing Tees				
2.3.2.3.1		160 mm Ø x 110 mm Ø Reducing Tee	No			Rate Only
2.3.2.3.2		110 mm Ø x 75 mm Ø Reducing Tee	No			Rate Only
CARRIE	D FORV	VARD				

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGI	HT FOR	WARD				
2.3.2.4		Cast Iron End Caps for				
2.3.2.4.1		160 mm Ø uPVC pipes	No	1		
2.3.2.4.2		110 mm Ø uPVC pipes	No			Rate Only
2.3.2.4.3		75 mm Ø uPVC pipes	No			Rate Only
2.3.2.5		Cast Iron Hydrant Tees				
2.3.2.5.1		160 mm Ø x 80mm Ø	No	1		
2.3.2.5.2		110 mm Ø x 80mm Ø	No			Rate Only
2.3.3	8.2.3	VALVES				
		Supply and install valves (valve box measured				
		separately) on concrete support, joint, incl. cut				
		pipes where necessary, test, right hand closing,				
		non-rising spindle, with cap top:				
2.3.3.1		"AVK" Gate Valve PN 16 with "Wavisafe"				
		socket ends for uPVC pipes or similar				
		approved:				
2.3.3.1.1		160 mm Ø	No	2		
2.3.3.1.2		110 mm Ø	No			Rate Only
2.3.3.2		Air Valve/scour valve, PN 16 with "Wavisafe"				
2.3.3.2.1		socket ends for uPVC pipes or similar				
		approved:				
2.3.4		Fire Hydrants				
2.3.4.1		Supply and install CI fire hydrants, 65 mm				
		bayonet connection, complete as per detail	No	1		
2.3.5	8.2.11	ANCHOR/THRUST BLOCKS AND PEDESTA	LS 			
2.3.5.1		Construct Anchor / Thrust block and pedestals as per	No	36		
		details on relevant drawing				
CARRIE	D FOR					

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGH	HT FOR	WARD				
2.3.5	8.2.13	VALVE CHAMBERS				
2.3.5.1		Construct Bell-Toby Type valve chambers complete				
2.3.5.1.1		For 160 Ø valves or greater:	No	6		
2.3.5.1.2		Marker blocks	No	6		
2.3.5.2		Break into main. Excavate, backfill and dispose				
		of surplus material and specials. (Fittings needed				
		for connection measured seperately)				
2.3.5.2.1		160 mm diam. uPVC Water Main	No	2		
		SECTION 2.4: BEDDING (PIPES)				
		SANS 1200 LB: BEDDING (PIPES)				
2.4.1	8.2.1	PROVISION OF BEDDING FROM TRENCH				
		EXCAVATION (Sub clause 3.4.1)				
2.4.1.1		a) Selected granular material	m ³			Rate Only
2.4.1.2		b) Selected fill material	m ³			Rate Only
2.4.2	8.2.2	Supply of bedding by importation				
2.4.2.1		a) Selected granular material	m ³	157.29		
2.4.2.2		b) Selected fill material	m ³	315		

PART 2: UPTOWN WATER SUPPLY PIPE LINE : CARRIED FORWARD TO SUMMARY

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		PART 3: WATER SUPPLY PIPELINE				
		SECTION 3.1: SITE CLEARANCE				
		SANS 1200 C: SITE CLEARANCE				
3.1.1	8.2.1	CLEAR AND GRUB				
3.1.1.1		Clear and grub Strips for water pipeline of 3m wide	ha	0.40		
3.1.2	8.2.2	REMOVE AND GRUB LARGE TREES AND TR	EE			
		STUMPS OF GIRTH:				
3.1.2.1		Over 1 m and up to and including 2 m	No.			Rate Only
3.1.2.2		Over 2 m and up to and including 3 m	No.			Rate Only
		SECTION 3.2: EARTHWORK				
		SANS 1200 DB: EARTHWORKS				
		(PIPE TRENCHES)				
3.2.1	8.3.2	EXCAVATION				
3.2.1.1	(a)	EXCAVATE IN ALL MATERIALS FOR				
		TRENCHES, BACKFILL, COMPACT AND				
		DISPOSE OF SURPLUS MATERIAL FOR:				
		Main Lines:				
3.2.1.1.2		Up to 160 mm diam. for total trench depth:				
		Soft Excavation Exceeding 0,5 m but not 1,3 m	m³	660		
		as per item 3.1.2 a) in SANS 1200DA				
3.2.1.2	(b)	EXTRA-OVER FOR ITEM 8.3.2 (a) ABOVE FOR:				
3.2.1.2.1		Extra Over for intermediate Excavation as per	m³	198		
		item 3.1.2 b) in SANS 1200DA				
3.2.1.2.2		Extra Over for Hard Rock Excavation as per	m³	924		
	• 	item 3.1.2 c) in SANS 1200DA				
CARRIE	D FORV	VARD				

BROUGI	HT FOR	WARD			
3.2.1.3	(c)	DISPOSE OF UNSUITABLE MATERIAL FR	OM 		
		TRENCH BOTTOM			
3.2.1.3.1		Dispose of unsuitable material from trench bottom	m ³		Rate Only
3.2.2	8.3.3	EXCAVATION ANCILLARIES			
	8.3.3.1	MAKE UP DEFICIENCY IN BACKFILL			
		MATERIAL (PROVISIONAL)			
3.2.2.1	(a)	from other necessary excavations on site	m ³		Rate Only
3.2.2.2	(b)	by importation from designated borrow pits	m ³		Rate Only
3.2.2.3	(c)	by importation from commercial or off-site sources	m ³	396	
		selected by the contractor			
		SECTION 3.3: MEDIUM PRESSURE PIPELINES			
		SANS 1200 L: MEDIUM PRESSURE PIPELI	 NES 		
3.3.1	8.2.1	SUPPLY, LAY AND BED PIPES COMPLETE			
		WITH COUPLINGS			
3.3.1.1		uPVC pipes Class 9: Supply, handle, lay,			
		and bed, joint , test, and disinfect			
		(potable water pipeline)			
3.3.1.1.1		160 mm Ø	m	1,320	
3.3.1.1.2		110 mm Ø	m		Rate Only
3.3.1.1.3		75 mm Ø	m		Rate Only
CARRIE	D FORV	VARD			

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGH	T FOR	WARD				
3.3.2	8.2.2	EXTRA OVER 8.2.1 FOR SUPPLYING, LAYING AND BEDDING OF SPECIALS COMPLETE WITH COUPLINGS Supply, lay, and bed Class 9 joint, incl. cut pipes to length where required, test and disinfect:				
3.3.2.1		uPVC Pressure Bends				
3.3.2.1.1 3.3.2.1.2 3.3.2.1.3 3.3.2.1.4 3.3.2.1.5 3.3.2.1.6 3.3.2.1.7 3.3.2.1.8 3.3.2.1.9 3.3.2.1.10 3.3.2.1.11		160 mm Ø, 11.25° 160 mm Ø, 22.5° 160 mm Ø, 45° 160 mm Ø, 90° 110 mm Ø, 11.25° 110 mm Ø, 22.5° 110 mm Ø, 45° 110 mm Ø, 90° 75 mm Ø, 11.25° 75 mm Ø, 22.5° 75 mm Ø, 90°	NO N	14 14 10 3		Rate Only Rate Only Rate Only Rate Only Rate Only Rate Only Rate Only
3.3.2.2.1 3.3.2.2.2 3.3.2.2.3 3.3.2.3.3 3.3.2.3.1 3.3.2.3.2		Cast Iron Equal Tees 75 mm Ø Equal Tee 110 mm Ø Equal Tee 160 mm Ø Equal Tee Cast Iron Reducing Tees 160 mm Ø x 110 mm Ø Reducing Tee 110 mm Ø x 75 mm Ø Reducing Tee	No No No	2		Rate Only Rate Only Rate Only Rate Only
CARRIE	D FORV	VARD				

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGI	HT FOR	WARD				
3.3.2.4		Cast Iron End Caps for				
3.3.2.4.1		160 mm Ø uPVC pipes	No			Rate Only
3.3.2.4.2		110 mm Ø uPVC pipes	No			Rate Only
3.3.2.4.3		75 mm Ø uPVC pipes	No			Rate Only
3.3.2.5		Cast Iron Hydrant Tees				
3.3.2.5.1		160 mm Ø x 80mm Ø	No	1		
3.3.2.5.2		110 mm Ø x 80mm Ø	No			Rate Only
3.3.3	8.2.3	VALVES				
		Supply and install valves (valve box measured				
		separately) on concrete support, joint, incl. cut				
		pipes where necessary, test, right hand closing,				
		non-rising spindle, with cap top:				
3.3.3.1		"AVK" Gate Valve PN 16 with "Wavisafe"				
		socket ends for uPVC pipes or similar				
		approved:				
3.3.3.1.1		160 mm Ø	No	4		
3.3.3.1.2		110 mm Ø	No			Rate Only
3.3.3.2		Air Valve/scour valve ,PN 16 with "Wavisafe"				
3.3.3.2.1		socket ends for uPVC pipes or similar				
		approved:				
3.3.3.2.2		160 mm Ø	No	5		
3.3.3.2.3		110 mm Ø	No			Rate Only
3.3.4	8.2.11	ANCHOR/THRUST BLOCKS AND PEDESTA	LS			
3.3.4.1		Construct Anchor / Thrust block and pedestals as per	No	30		
		details on relevant drawing				
CARRIE	D FORV	l VARD	1 1		<u> </u>	

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGI	HT FOR	WARD				
3.3.5	8.2.13	VALVE CHAMBERS				
3.3.5.1		Construct Bell-Toby Type valve chambers complete				
3.3.5.1.1		For 160 Ø valves or greater:	No	9		
3.3.5.1.2		Marker blocks	No	9		
313131112		Harter block	110	J		
3.3.5.2		Break into main. Excavate, backfill and dispose				
		of surplus material and specials. (Fittings needed				
		for connection measured seperately)				
3.3.5.2.1		160 mm diam. uPVC Water Main	No	2		
3.3.6		Fire Hydrants				
3.5.6.1		Supply and install CI fire hydrants, 65 mm				
		bayonet connection, complete as per detail	No	1		
3.4		SANS 1200 LB: BEDDING (PIPES)				
3.4.1	8.2.1	PROVISION OF BEDDING FROM TRENCH				
		EXCAVATION (Sub clause 3.4.1)				
3.4.1.1		a) Selected granular material	m ³			Rate Only
3.4.1.2		b) Selected fill material	m ³			Rate Only
3.4.2	8.2.2	Supply of bedding by importation				
3.4.2.1		a) Selected granular material	m ³	198.03		
3.4.2.2		b) Selected fill material	m ³	396		

PART 2 – Employer's Requirements

Section V - Employer's Requirements

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SPECIFICATIONS

WORKS SPECIFICATIONS

SCOPE OF WORK

The works entails *Replacement of Bulk Water Pipeline for a Distance Of 3km In Uis Settlement Area, Erongo Region* As a result, the following work components will be installed:

Water Reticulation:

- i. Water lines
- ii. Water related miscellaneous items installations

DESCRIPTION OF SITE AND ACCESS

- ❖ The works are situated in Uis Settlement.
- ❖ The Tenderer shall be deemed to have thoroughly acquainted himself with the nature and extent of the site, to have visited the site, carefully examined the conditions under which the work is to be done and the means of access, acquainted himself with any limitations or restrictions that may be imposed upon him and generally with all matters which may influence his Tender and is to provide for any additional costs involved thereby. No claim will be recognized after submission of the Tender on the grounds of lack of knowledge of Site conditions.
- * The working areas shall be defined as follows:
 - Water reticulation works will be installed as per the water reticulation layouts and details.
- ❖ Under no circumstances shall the Contractor, his workmen or machinery be allowed on other private property. During construction, the Contractor shall limit his operations to the construction areas shown on the drawings and adhere to the requirements of the Environmental Management Specification.

PARTICULARS OF THE WORK

❖ The works shall be in accordance with the project specifications and to the satisfaction of the Engineer, and shall include all items necessary for the completion of the services in their entirety, whether specified in detail or not. No extra costs will be considered for the provision of these services unless specifically detailed by the Contractor in a covering letter submitted with his Bid.

The work under this Contract consists of the following main elements:

WATER WORKS

- 1) 160 mm Diameter uPVC class 9 of blue colour water mains: 2,359.20m long
- 2) AVK Gate Valves PN 16 with Wavisafe socket ends, Air and Scour Valves for uPVC pipes of 160mm diameter
- ❖ The Contractor shall issue all notices and make arrangements with Erongo Regional Council as a Client, Namwater, Roads Authority, and other authorities as may be required with respect

- to the installation of the services. He shall also take all the necessary precautions and provide warning signs and/or lights to ensure that the public and/or employees are not endangered.
- ❖ The Contractor shall acquaint himself with the position of existing services and infrastructure prior to commencing the installation. He will be held responsible for damage to any existing services and will be responsible for the cost of repairs. Damage to existing services shall be reported immediately to the responsible authority.

CHANGES TO THE SCOPE OF WORK

- ❖ The Employer reserves the right to delete at any time before or during construction, and in his exclusive discretion, any section of any separate portion of the works (as specified in the Specifications and the Bill of Quantities from the scope of this Bid or any subsequent contract entered into between the parties.
- Likewise, the Employer shall have the right to add an additional section or sections to any of the separate portions as specified.

RESPONSIBILITY OF THE CONTRACTOR

- ❖ Until the Contract Works have been completed or deemed to have been completed the Contractor shall be responsible (subject to the Memorandum of Agreement and the Conditions of Contract), for the Contract Works, where under construction, during tests, or in use by the Employer.
- ❖ The Contractor shall nominate a full time contract manager, with construction management qualification/experience, properly introduced and approved by the Engineer to manage this contract for the full duration of the contract.
- ❖ During the period of maintenance, the Contractor shall make such arrangements as to ensure the attendance on Site within twenty-four hours of his being called upon to do so, of a competent representative for the purpose of carrying out any work or maintenance for which the Contractor shall be liable, and during such part of parts of the said period as the Engineer may deem it necessary, the said representative shall be continuously available on the Site.
- ❖ Work on the site shall be carried out at such times and during such hours as the Engineer may require.

WORK CO-ORDINATION

❖ The work in its entirety must be complete within the contract period as prescribed by the Special Conditions of Contract.

SITE HAND-OVER

- Prior to the commencement of the work, the sites will be handed over to the successful Bidder for the respective area. The hand-over includes a site visit to the area included in the Contract.
- ❖ At the site hand-over, the location of the Contractor's site office and camp will be discussed and determined if applicable.

SUPERVISION

❖ All work shall be executed under the supervision of the Engineer and in accordance with site instructions that will be issued to the Contractor by the Engineer.

SITE INSTRUCTIONS

- ❖ A triplicate site instruction book will be issued to the Contractor at site hand-over. Specific instructions as to how work shall be executed will be entered into this book by the Engineer once the exact details of each portion of the work to be done have been determined.
- ❖ All site instructions will be discussed with the Contractor.
- ❖ The site instruction book must at all times be available at the Contractor's site office, so that the Engineer may write instructions even when the Contractor is not present.

SITE MEETINGS

- * Regular site meetings, at dates and times to be determined by the Engineer, will be held to evaluate progress and discuss matters pertaining to the Contract. It is not the purpose of such meetings to discuss matters concerning the day-to-day running of the Contract.
- ❖ The Contractor or his authorised representative shall attend all site meetings, to which the Employer will also be invited. If not agreed to otherwise, these site meetings shall be held at the Contractor's site office.

INSPECTIONS

- ❖ Site inspections will be conducted prior to the site meetings so that specific problems that are identified at the inspections may be discussed.
- Whenever any section of the works is complete, the contractor must inform the Engineer of this in writing so that a site visits to inspect, measure, test or commission the completed section of the works may be arranged.

COMMISSIONING

- ❖ The Contractor shall be responsible for commissioning all sections of the works and shall perform the tasks set out below:
- ❖ Prior notice of and proper arrangements for the commissioning shall be made with the Employer and the Engineer.
- ❖ All sections of the works shall be carefully inspected by a responsible representative of the Contractor to ensure that all construction work has been properly completed.
- ❖ The Contractor shall carry out the tests specified in the Manufacturer's Works, on the site or elsewhere in accordance with the conditions thereof and such additional tests as in the opinion of the Engineer necessary to determine that the Contract Works comply with the conditions of this Specification, where under test or ordinary working conditions.
- ❖ All materials used shall also be subjected to and shall withstand satisfactorily such routine tests as are customary in the manufacture of the types of plant or material included in the Contract Works,
- Where, at the direction of the Engineer, tests and/or analyses are effected elsewhere than at the Works of the Contractor or a Sub-Contractor, or on the Site the costs incurred will be borne by the employer should such tests prove satisfactory, but the Contractor will be called upon to pay

all expenses incurred by the Employer in respect of any work or materials found to be defective, or of inferior quality, adulterated or otherwise unacceptable.

- ❖ The Engineer shall be given at least 7 days' written notice of tests.
- ❖ All tests shall be carried out in the presence of, and to the satisfaction of the Engineer and at such times as they may require. The Contractor shall supply suitable test pieces of all materials as required by the Engineer.
- ❖ All labour, materials, fuel, stores, apparatus, instruments and connections required for the above tests shall be provided by the Contractor. All apparatus and materials supplied under the Contract are subject to inspection by the Engineer, who shall be notified 14 days in advance when the material is ready for inspection.
- * Tests to be carried out on site: -
 - Such other tests as are required by the Engineer to prove compliance with the Specification independently of any test, which may already have been carried out at the Manufacturer's Works, or elsewhere.

STANDARDS

The work done shall comply with the following standards and regulations and has to be to the satisfaction of the Engineer and the Employer:

These project specifications are set out in two portions. Portion 1 covers the general description of the project, the facilities available and the requirements to be met. Portion 2 covers variations and additions to the SANS 1200 standardized specifications that are applicable to this contract.

PS 23: APPLICABLE STANDARDIZED SPECIFICATIONS

For the purposes of this contract, the following SANS 1200 standardized specifications shall apply:

SANS 1200 A: General

SABS 1200 AA: General (Small works)

SANS 1200 C: Site clearance

SANS 1200 D: Earthworks

SABS 1200 DA: Earthworks (Small works)

SABS 1200 DB: Earthworks (Pipe trenches)

SANS 1200 G: Concrete (Structural)

SABS 1200 GA: Concrete (Small works)

SANS 1200 L: Medium-pressure pipelines

SABS 1200 LB: Bedding (pipes) (1983)

SABS 1200 LK: Valves

SANS 1601: uPVC Structure wall pipe

Variations and additions to the following SANS 1200 standardized specifications are given in Portion 2 of the Project Specifications:-

SANS 1200 A: General

SANS 1200 C: Site clearance

SANS 1200 D: Earthworks

SANS 1200 DB: Earthworks (pipe trenches)

SANS 1200 G: Concrete (Structural)

SANS 1200 L: Medium-pressure pipelines

SANS 1200 LB: Bedding (pipes)

PROJECT SPECIFICATIONS

PORTION 2: VARIATIONS AND ADDITIONS TO THE STANDARDIZED SPECIFICATIONS FOR THIS CONTRACT AND PARTICULAR SPECIFICATIONS

The following variations and additions to the SANS 1200 standardized specifications referred to in the last clause of portion 1 apply to this contract. The prefix PS indicates an amendment to SANS 1200. The letters and numbers following these prefixes respectively indicate the relevant standardized specification and clause numbers in SANS 1200.

The prefix "PS" indicates Particular Specifications, which are additional to the SANS 1200 standardized specifications.

PSA: GENERAL PSA 1: SCOPE

Replace sub clause 1.1 with the following:

"1.1 This specification covers requirements, principles and responsibilities of a general nature that are normally applicable to all civil engineering contracts, as well as the requirements for the contractor's establishment on the site."

PSA 2: INTERPRETATIONS

PSA 2.3: Definitions

(a) General

Add the following definitions:

"General conditions: The general conditions of contract specified for use with this contract and the special conditions of contract as applicable.

Specified: As specified in the standardized specifications, the drawings or the project specifications. Specifications shall have the corresponding meaning."

(c) Measurement and payment

Replace the definitions for fixed charge, time-related charge and value-related charge with the following:

"Fixed charge: A charge that is not subject to adjustment on account of variation in the value of the contract amount or the contract time of completion.

Time-related charge: A charge, the amount of which varies in accordance with the time for completion of the work, adjusted in accordance with the provisions of the contract.

Value-related charge: A charge, the amount of which varies pro rata with the final value of the measured work executed and valued in accordance with the provisions of the contract."

PSA 2.4: Abbreviations

(f) Abbreviations relating to standard documents

Add the following abbreviation: "CKS: SANS Coordinating Specification."

PSA 3: MATERIALS

PSA 3.1: Quality

Add the following:

"All manufactured materials supplied shall be new materials unless the contrary is specified. All materials specified in accordance with SANS specifications shall bear the SABS mark, whether so specified or not."

Add the following sub clauses:

PSA 3.3: Ordering of materials

The quantities set out in the schedule of quantities have been carefully determined from calculations based on data available at the time and should therefore be considered to be approximate quantities only. Before ordering materials of any kind the contractor shall check with the Engineer whether or not the scope of the work for which the materials are required is likely to change substantially. No liability or responsibility whatsoever shall be attached to the Employer for materials ordered by the contractor except when ordered in accordance with written confirmation issued by the Engineer.

PSA 4: PLANT

PSA 4.2: Contractor's offices, stores and services

Add the following paragraph before the first paragraph:

"The contractor's construction camp shall be fenced off and shall contain all offices, stores, workshops, testing laboratories, toilet facilities, etc. The camp shall always be kept in a neat and orderly condition. No personnel may reside on the site. Only night-watchmen may be on the site after hours."

Add the following to the second paragraph:

"One toilet per 10 workmen shall be provided and must be screened from public view and its use shall be enforced.

The contractor shall, where applicable, make the necessary arrangements for the removal of night soil."

PSA 5: CONSTRUCTION

PSA 5.1: Drawings and details

Tender drawings shall not be used for construction purposes. Construction drawings and additional detailed information will be made available to the Contractor as and when required by him.

PSA 5.2: Survey

PSA 5.2.1: Setting out of the Works. (Subclause 5.1.1)

Before commencing any construction, the Contractor shall check the relative positions and levels of all reference pegs, bench marks and line pegs and inform the Engineer of any discrepancy. The Contractor shall be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provisions of all necessary instruments, appliances and labour in connection therewith. The Contractor shall carefully protect and preserve all benchmarks, sight-rails, pegs and other things used in setting out the Works. The checking of any setting-out or of any line or level by the Engineer shall not relieve the Contractor of his responsibility for the correctness thereof.

If at any time during the progress of the Works, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required to do so by the Engineer, shall at his own expense rectify such error to the satisfaction of the Engineer, but if such error is based on incorrect data supplied in writing by the Engineer or if there is any delay in providing the particulars required, the Contractor shall, in respect of that delay and the Cost of such rectification, be entitled to make a claim in accordance with Clause 20.1 of FIDIC Conditions of Contract for Construction (Red Book).

The Contractor shall advise the Engineer of any conflict between the position of any part of the Works and an existing feature.

PSA 5.2.2: Survey beacons. (Subclause 5.1.2)

Before the Contractor commences any work on the erven, he shall search for the erf pegs. If any erf pegs are missing, he shall immediately inform the Engineer in writing.

PSA 5.3: Existing services (Subclause 5.4)

PSA 5.3.1: Action by Contractor (Subclause 5.4)

All services, in particular cables, shall be treated as live until proven otherwise.

Before commencing any excavation for trenches works in a specific area, the Contractor shall locate all existing services with the co-operation of the relevant authority, and carefully excavate by hand, expose and survey such services. If the information regarding any existing service as given in the drawings is either missing, incomplete or erroneous, the Contractor shall, as soon as the service has been located, submit details of the exact location, depth and type of service in writing to the Engineer.

PSA 5.3.2: Work done by service authorities

The Contractor shall give assistance to service authorities with the location, protection, alteration and/or removal of services controlled by that authority.

PSA 5.4: Protection of overhead and underground services

Replace the heading and the contents of this sub clause with the following:

PSA 5.4: Location and protection of existing services

PSA 5.4.1: Location of existing services

Before underground or excavation work is carried out, the contractor shall ascertain the presence and position of all services likely to be damaged or interfered with by his activities. He shall obtain up-to-date plans from the Municipality for this purpose, showing the position of services in the area where he intends to work. As services can often not be reliably located from such plans, the contractor shall determine the exact position of such services by means of suitable detecting equipment and afterwards by careful hand excavation where necessary in order to expose the services at the positions of possible interference by his activities. This procedure shall also be followed in respect of services not shown on the plans but believed to be present.

All such services, the positions of which have been located at the critical points, shall be designated as 'known' services and their positions shall be indicated on a separate set of drawings, a copy of which shall be furnished to the Engineer.

While he is occupying the site, the contractor shall be liable for all damage caused by him to known services as well as for consequential damage, whether caused directly by his operations or by the lack of proper protection.

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The contractor shall exercise all the necessary care to prevent damage to known services during

construction operations. Major excavating equipment and other plant shall not be operated dangerously

close to these services.

Where necessary, excavation in close proximity to these services shall be carefully carried out with

suitable hand tools, excluding picks wherever their use could damage the services. No additional

payment will apply to such more difficult work and hence the contractor is deemed to have allowed

for it in relevant tender rates.

Services left exposed shall be suitably protected from damage.

PSA 5.4.3: Alterations and repairs to existing services

Unless the contrary is clearly specified or ordered, the contractor shall not carry out alterations to

existing services. When this is necessary, the contractor shall inform the Engineer, who will either

make arrangements for such work to be executed by the owner of the service, or instruct the contractor

to make such arrangements himself.

When existing services are damaged by the contractor, he shall immediately inform the Engineer, or

when this is not possible, the relevant authority, and obtain instructions as to who should carry out

repairs. In urgent cases the contractor shall take the necessary steps to minimize damage to and

interruption of the service. No repairs of telecommunication cables or electric power lines and cables

shall be attempted.

A list of important telephone numbers for use when services are damaged or need to be altered is

provided below:

Erongo Regional Council: Tel: +264 64 410 5700

Engineer: ALV Consulting Engineers: +264 (0)65 238 576

The Employer will accept no liability for damages due to a delay in having such alterations or repairs

effected. The contractor shall provide all reasonable opportunity, access and assistance to persons

carrying out alterations or repairs of existing services."

Add the following sub clause:

PSA 5.9: Site meetings

The contractor will be required to attend regular site meetings, normally held once a month to discuss

general progress, quality of work, problems, claims, payments, etc, but not matters concerning the day-

to-day running of the contract. The contractor must be represented at the site meetings by a person

authorized to take decisions."

PSA 5.10: Survey

All setting out and survey work required under this Contract shall be the Contractors responsibility. No separate payment will be made for this work and the cost thereof will be deemed to be included under the tendered rates."

PSA 6: TOLERANCES

Add the following subclause:

PSA 6.4: General

No guarantee is given that the full specified tolerances will be available independently of each other, and the contractor is cautioned that the liberal or full use of any one or more of the tolerances may deprive him of the full or any use of tolerances relating to other aspects of the work.

Except where the contrary is specified or when clearly not applicable, all quantities for measurement and payment shall be determined from the 'authorized' dimensions. These are specified dimensions or those shown on the drawings or, if changed, as finally prescribed by the Engineer, without any allowance for the specified tolerances. Except if otherwise specified, all measurements for determining quantities for payment will be based on the 'authorized' dimensions.

If the work is therefore constructed in accordance with the 'authorized' dimensions plus or minus the tolerances allowed, quantities will be based on the 'authorized' dimensions regardless of the actual dimensions to which the work has been constructed.

When the work is not constructed in accordance with the 'authorized' dimensions plus or minus the tolerances allowed, the Engineer may nevertheless, at his sole discretion, accept the work for payment. In such cases no payment shall be made for quantities of work or material in excess of those calculated for the 'authorized' dimensions, and where the actual dimensions are less than the 'authorized' dimensions minus the tolerance allowed, quantities for payment shall be based on the actual dimensions as constructed."

PSA 7: TESTING

PSA 7.1: Principles

PSA 7.1.1: Checking

Replace the last sentence with the following:

"The contractor shall obtain the services of an approved independent laboratory at his own expense (clause Error! Reference source not found. of Portion 1 of the Project S pecifications) to carry out the checks prescribed in the various standardized specifications."

PSA 7.1.2: Standard of finished work not to specification

Replace the words:

"Where the Engineer's checks reveal ..." with "Where the checks by the approved laboratory reveal"

PSA 7.2: Approved laboratories

Add the following:

"The independent laboratory used by the contractor and approved by the Engineer shall also be deemed an approved laboratory."

Add the following subclause:

PSA 7.5: Samples

The contractor shall timeously provide, so as not to delay any of the works, samples of materials intended for bedding of pipes, backfill of trenches and selected subgrade layer works from the trenches, borrow pits or commercial sources, whichever the case may be and hand them over to the approved test laboratory to determine the suitability of the material with regard to its specified MOD, CBR and PI characteristics. The costs of these tests shall be deemed to have been allowed for in the tendered rates.

The number and positions of the samples taken shall be the minimum required to establish which insitu or imported materials are suitable for bedding and backfill purposes; shall be taken at the approval of the Engineer and shall generally be taken where the physical nature of the soil markedly changes.

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PSA 8: MEASUREMENT AND PAYMENT

PSA 8.1: Measurement

PSA 8.1.2: Preliminary and general items or section

PSA 8.1.2.2: Tendered sums

Replace the contents of this subclause with the following:

"The contractor's tendered sums under items PSA 8.3 and PSA 8.4 shall collectively cover all charges for:

- risks, costs and obligations in terms of the general conditions of contract and of this standardized specification, except where provision is made in these project specifications to cover compensation for any of these items
- Head-office and site overheads and supervision
- profit and financing costs
- expenses of a general nature not specifically related to any item or items of permanent or temporary work
- providing facilities on site for the contractor's personnel, including offices, storage facilities, workshops, ablutions, for providing services such as water, electricity and Telecom services, sewerage, sewage and rubbish disposal and all other facilities required, as well as for the service costs, maintenance and removal on completion of the works of these facilities and the cleaning-up of the camp site on completion of the works
- providing facilities for the Engineer and staff

PSA 8.2: Payment

PSA 8.2.1: Fixed-charge and value-related items

Replace the contents of this subclause with the following:

"Payment of fixed charges in respect of item 8.3.1 will be made as follows:

80% of the sum tendered will be paid when the facilities have been provided and approved. The remaining 20% will be paid when the works have been completed, the facilities have been removed and the camp site has been cleared and cleaned.

Payment for the sum tendered under item 8.3.2 will be made in three separate instalments as follows:

(a) The first instalment, which is 40% of the sum, will be paid when the contractor has fulfilled all his obligations to date under this specification, the general conditions of contract and the special conditions of contract, and when the value of work certified for payment, excluding materials on

site and payments for preliminary and general items, is equal to not less than 5% of the total value of the work listed in the schedule of quantities.

- (b) The second instalment, which is 40% of the sum, will be made when the amount certified for payment, including retention monies but excluding this second instalment, exceeds 50% of the tender sum.
- (c) The final payment, which is 20% of the sum, will be made when the works have been certified as completed and the contractor has fulfilled all his obligations to date under this specification, the general conditions of contract and the special conditions of contract.

Should the value of the measured work finally completed be more or less than the tender sum, the sum tendered under item 8.3.2 will be adjusted up or down in accordance with the provisions of clause 53 of the general conditions of contract, and this adjustment will be applied to the third instalment. No adjustment will apply to item 8.3.1 in respect of variations in the value of work done or the finally authorized time for completion."

PSA 8.2.2: Time-related items

Replace the contents of this subclause with the following:

"Subject to the provisions of subclauses 8.2.3 and 8.2.4, payment under item 8.4.1 (time-related item) will be made monthly in equal amounts, calculated by dividing the sum tendered for the item by the tendered contract period in months, provided always that the total of the monthly amounts so paid for the item is not out of proportion with the progress of the work as a whole.

Should the Engineer grant an extension of time for completion of the works, the contractor will be entitled to an increase in the sum tendered for the time-related item, which increase shall be in the same proportion to the original tendered sum as the extension of time is to the original time for completion of the works.

Payment of such increased amounts will be deemed full compensation for all additional time-related preliminary and general costs due to the circumstances pertaining to the extension of time granted."

PSA 8.3: Scheduled fixed-charge and value-related items

Replace the items with the following:

PSA 8.3.1: Fixed preliminary and general charges

Unit: sum

The sums tendered shall include full compensation for all fixed and value-related preliminary and general charges as described in subclause PSA 8.1.2.2. Payment will be made as described in subclause PSA 8.2.1."

PSA 8.4: Scheduled time-related items

Replace the items with the following:

"PSA 8.4.1: Time-related preliminary and general charges

Unit: sum

The sum tendered shall include full compensation for all time-related preliminary and general charges as described in subclause PSA 8.1.2.2. Payment will be made as described in subclause PSA 8.2.2." *Replace this item with the following:*

PSA 8.6 Prime Cost Sums

Additional tests required by the Engineer

Charge required by Contractor on sub-item (a) above

Unit: %

Unit: PC Sum

The Prime Cost Sums provided under sub-item (a) in the Schedule of Quantities will be expended in accordance with Subclause 48(2) of the General Conditions of Contract.

The tendered percentage under sub-item (b) will be paid to the Contractor on the value of each payment to the approved testing laboratory.

Note in connection with sub-item (a):

The Contractor is responsible for both the cost of normal testing as described in Subclause PS 8.2 in Portion 1 of the Project Specifications and for the cost of any additional test that indicates that the Specifications have not been complied with."

PSA 8.8: Temporary works

Replace item 8.8.4 with the following:

"PSA 8.8.4: Location and protection of existing services:

PSA 8.8.4.1: Provision of detecting devices for:

Water and sewer pipes

Unit: Sum

Electrical and other cables

Unit: Sum

The tendered sums shall cover the cost of providing and operating suitable equipment for as long as it is needed to locate all the existing services likely to be affected by the construction activities. Alternatively, an approved specialist firm may be employed to carry out the work.

PSA 8.8.4.2: Hand excavation necessary for locating and exposing existing services in all material:

In all other areas Unit: m³

The rates shall cover the cost of excavating by means of hand tools within authorized dimensions, for all precautionary measures to protect the services from damage during excavation and backfilling, and for subsequent backfilling and compacting. Compaction of material in all areas shall be to 90% of the modified AASHTO density.

The tendered rates shall also include for keeping excavations safe, for dealing with surface and subsurface water, for removing surplus excavated material from the Site, for transporting all material within the full haul distance to the approved spoil site, and for supplying adequate supervision during both excavation and backfilling operations. No separate payment will be made for overhaul, which will be deemed to be included under this item."

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PSC: SITE CLEARANCE

PSC 3: MATERIALS

PSC 3.1: Disposal of material

Add the following:

"The contractor shall obtain his own dumping sites for the disposal of material and all transport costs shall be included in the rates tendered for site clearance."

PSC 5: CONSTRUCTION

PSC 5.1: Areas to be cleared

Add the following:

"Pipeline routes shall be cleared to a distance of 1,5m on both sides of the pipeline centre line. Route pegs, erf pegs or markers shall not be destroyed or damaged during clearing operations. Only areas where actual clearing was required along the route, as instructed by the Engineer, shall be payable."

PSC 8: MEASUREMENT AND PAYMENT

PSC 8.2.1: Clear and grub

This payment item to be omitted. Clearing of surfaces will only be, where deemed necessary, on instruction of the Engineer under Item 8.2.4.

PSC 8.2.4: Re-clear surfaces (only on instructions from the Engineer).

Replace the first line with the following:

"The areas instructed by the Engineer to be cleared will be measured in hectare (ha) or meters for strips over pipelines."

PSD: EARTHWORKS

PSD 2: INTERPRETATIONS

PSD 2.1: Supporting specifications

Replace subclause 2.1.2 with the following:

"PSD 2.1.2: Any of the other SANS 1200 Specifications may form part of the Contract Documents."

PSD 2.3: Definitions

Replace the word and the definition for "Borrow" with the following:

"Borrow material: Material, other than material obtained from excavations required for the Works, obtained from sources such as borrow pits or the authorised widening of excavations. 'Borrow' shall have a corresponding meaning."

Replace the definition for "Specified density" with the following:

"Specified density: The specified dry density expressed as a percentage of modified AASHTO dry density."

Replace the definition for "Stockpile" with the following:

"Stockpile (verb): The process of selecting and, when necessary, loading, transporting and off-loading material in a designated area for later use for a specific purpose."

Add the following definitions:

"Fill: An embankment constructed of material obtained from excavations or borrow pits.

Fill (material): Material used for the construction of an embankment."

PSD 3: MATERIALS

PSD 3.1: Classification for excavation purposes

PSD 3.1.1: Method of classifying

Add the following:

"The classification of material other than 'soft excavation' shall be agreed upon before excavation may commence.

The Contractor shall immediately inform the Engineer if and when the nature of the material being excavated changes to such an extent that a new classification is warranted for further excavation. Failure on the part of the Contractor to advise the Engineer in good time shall entitle the Engineer to reclassify, at his discretion, such excavated material."

PSD 3.2.3: Material suitable for backfill or fill against structures (manholes, etc)

Replace the contents of this subclause with the following:

"Material used for backfill behind structures, such as manholes, shall generally be the material excavated, subject to the following conditions:

- (a) The material shall not contain an excessive number of stones retained on a 50 mm sieve
- (b) The material shall not contain large clay lumps that do not break up under the action of the compaction equipment
- (c) The liquid limit of the material shall not exceed 40; neither shall the PI exceed 18."

PSD 3.3: Selection

Add the following subclause:

"PSD 3.3.3: Selection in borrow pits and excavations

Approval of a borrow area for a certain purpose does not necessarily mean that all the material in that area is suitable for the specified purpose. What it does mean is that the borrow area contains some suitable material. The onus shall rest on the Contractor to ensure that only material that is indeed suitable is removed and used for the specified purpose.

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When the Contractor has to select excavated material for a specific purpose, the above provisions relating

to borrow areas shall apply mutatis mutandis to excavations.

The Contractor shall not waste or contaminate material that has been selected for a specific purpose."

PSD 5: CONSTRUCTION

PSD 5.1: Precautions

PSD 5.1.1: Safety

PSD 5.1.1.3: Explosives

Replace the contents of this subclause with the following:

"The use of explosives is permitted on this project."

PSD 5.2: Methods and procedures

PSD 5.2.2: Excavation

PSD 5.2.2.1: Excavation for general earthworks and for structures

Add the following to paragraph (b):

"When the nature of the material precludes the above procedure, additional excavations shall be carried out to provide working space for the erection of formwork. In general, payment will be made for a working width of 600mm, but the Contractor may excavate a greater working width at no additional cost to the Employer."

Replace the contents of paragraph (e) with the following:

"Where excavations have been carried below the authorised levels, the Contractor shall backfill such excavations to the correct level with approved gravel compacted to 90% of modified AASHTO density or to the density of the surrounding material.

Where excavations for structures have been carried out in hard material, the Engineer may direct the overexcavation to be backfilled with weak concrete if there is a danger of settlement or differential settlement of the foundations.

Where the sides of excavations against which concrete is to be cast have been over-excavated or have collapsed partially, the Contractor shall retrim the excavations if necessary and, unless other remedial measures are agreed to by the Engineer, shall cast the concrete for the structure, including the additional concrete that may be required as a result of the over-excavation or partial collapse. The cost of the additional concrete or remedial measures shall be for the Contractor's account."

PSD 5.2.2.3: Disposal

Add the following:

(a) "The Contractor shall provide the necessary spoil site for <u>unsuitable material</u>, shall make the necessary arrangements with the owner of the site where the material is disposed of, and shall make

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provision in his rates for all charges in this regard and for transporting the material regardless of the distance involved."

(b) The Contractor shall stockpile the suitable surplus material for municipal use at a place outside the site, as directed by the Engineer.

Add the following subclauses:

"PSD 5.2.2.4: Selection and stockpiling

Approval or designation of the material in a particular borrow pit or excavation for a particular purpose does not imply that all the material in the borrow pit or excavation is suitable for that purpose or should be used for that purpose. The Contractor shall select suitable material from that source, discard unsuitable material and reserve material for other purposes as necessary. When required and as ordered by the Engineer, suitable material from excavations shall be stockpiled for later use as described above.

PSD 5.2.5: Transport for earthworks

Replace the contents with the following:

For the purposes of this Contract, the freehaul distance for all material shall be unlimited. Therefore, no additional haulage costs will be paid on the transporting of any material and the tendered rates will be deemed to include all haulage." This includes haulage from the designated borrow pit to site as indicated by the Engineer, disposal of spoil material as well cut to stockpile of suitable material from excavations.

PSD 7: TESTING

PSD 7.2: Taking and testing of samples

Replace the contents of this subclause with the following:

"The Contractor shall arrange with the approved laboratory to carry out sufficient tests on a regular basis as agreed between him and the Engineer to determine whether the degree of compaction, and, where applicable, the quality of materials used, comply with the Specifications and shall submit the results of these tests to the Engineer in a form approved by him.

The compaction requirements for fills shall be deemed complied with when at least 85% of the dry-density tests on any lot show values equal to or above the specified density and when no single value is more than five percentage points (5%) below the specified value."

PSD 8: MEASUREMENT AND PAYMENT

PSD 8.3: Scheduled items

No measurements and payments will be made under Section 1200 D.

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PSDB: EARTHWORKS (PIPE TRENCHES)

PSDB 3: MATERIALS

PSDB 3.5: Backfill materials

Add the following paragraphs:

(a) "Cement stabilized backfilling

Backfilling shall be stabilized with 5% cement where directed by the Engineer. Aggregate shall consist of approved soil or gravel containing stones not bigger than 38mm and with a plasticity index not exceeding 10.

The soil or gravel shall be mixed with 5% cement and shall be compacted in layers of 100mm thick to 90% of modified AASHTO density.

(b) Soil Crete backfilling

Aggregate for soilcrete shall be mixed with 5% cement and shall consist of approved soil or gravel containing stones not bigger than 38mm and with a plasticity index not exceeding 10. The soil or gravel shall be mixed in a concrete mixer with the cement and enough water to a slump of 100mm, so that the mixture can be placed with vibrators to fill all voids between the pipe and the sides of the trench. Shuttering shall be used where necessary."

PSDB 3.7: Selection

Replace the words "if he so wishes" in the first line of the second paragraph with the words "at his own cost".

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PSDB 5: CONSTRUCTION

PSDB 5.1.3: Accommodation of traffic and access to properties

Add the following to item (b):

"The Contractor shall at all times provide and allow pedestrian and vehicular access to properties within or adjoining or affected by the area in which he is working. In this respect the Contractor's attention is drawn to Clause 4.15 of the General Conditions. The Contractor shall at all times, wherever possible, keep open and maintain all existing roads on or about the Site that may be affected by his operations in connection with the Contract, and he shall construct and maintain, to the satisfaction of the Engineer, temporary access roads and steel or timber bridges over excavations in roads, sidewalks, entrances or accesses to properties. Temporary pedestrian access bridges shall be at least 1,2 m wide and temporary access bridges for vehicles shall be at least 3,6 m wide. All temporary access bridges shall be fitted with handrails as well as protective mesh fencing on both sides.

On completion of the work, the Contractor shall dismantle and remove all such temporary constructions and reinstate these areas to their former condition.

Full compensation for providing access to properties, including temporary access bridges, shall be included in the rate tendered for item PSDB 8.3.7."

PSDB 5.2: Minimum base widths

Replace paragraph (a) with the following:

"Where two pipes are placed in the same trench, they shall be 300 mm apart and the specified side allowance will still apply."

PSDB 5.4: Excavation

Add the following:

"Trenches shall be of such a depth that the minimum cover over the pipes shall be 600mm except at road crossings where the minimum cover shall be 1000mm."

Where no longitudinal sections of pipelines are detailed on the drawings, trench excavations shall be of such depth that the minimum cover over the pipe used shall be in excess of the minimum shown on the relevant details.

Where the routes of electric cables and telephone ducts coincide with the routes of trenches for water and sewer pipes, the pipe trenches shall be utilized for also installing cables and/or ducts.

No additional payment will be made to the contractor for any inconvenience he may experience, because of this requirement and it will be deemed that any such costs be included in the tendered rates."

PSD 5.6: Backfill

PSDB 5.6.3: Disposal of soft excavation material

Replace the contents of this subclause with the following:

"Excavation material from the trench that has become surplus shall be used as fill if suitable or shall be disposed of at an approved site to be furnished by the contractor and approved by the landowner/local authority and no overhaul will be paid on material disposed in this manner."

PSDB 5.7: Compaction

Add the following:

"Where pipelines cross existing gravel roads, backfilling shall be carried out as specified under 5.7.2 and payment there for will be made under sub-item 8.3.3.3.

PSDB 8: MEASUREMENT AND PAYMENT

PSDB 8.3: Scheduled items

PSDB 8.3.3: Excavation ancillaries

PSDB 8.3.3.4: Overhaul

Delete this item.

No overhaul will be paid for material in terms of this contract and costs for transporting material shall be included in the applicable tendered rates and amounts.

Replace item 8.3.7 with the following:

"PSDB 8.3.7 Accommodation of traffic

Unit: Sum

The tendered sum shall include full compensation for the accommodation of traffic and the construction and maintenance of bypasses, including existing roads used as bypasses, during the construction period. It shall also include full compensation for traffic control, traffic signs and, where necessary, communications equipment to regulate traffic, for the construction of temporary drainage works, for the maintenance of drainage works, arrangements for moving services, attending to traffic problems, and complying with the requirements of the Road Traffic Ordinance and the relevant local authorities. Note that all items listed under item PSDB 5.1.3 are to be included under this payment item. Payment shall be made in equal monthly instalments."

Add the following item:

PSDB 8.3.8: Removal of Redundant Sewer Lines

Unit: m

The unit of measurement is the m of pipework, including manholes, measured in position prior to excavation.

The tendered rate shall include full compensation for excavation in all materials irrespective of depth, breaking of all manholes and concrete and shall include all labour, equipment and plant required, loading and transporting to refuse removal site and backfilling trenches using excavated material free from any debris or building rubble, from other excavations or importation of backfill deficit, compaction of excavated trenches to natural state as well as all incidentals necessary to carry out the works.

PSL: MEDIUM PRESSURE PIPELINES

PSL 3: MATERIAL

PSL 3.1: General

Add the following paragraphs:

"Each type of pipe delivered to the Site shall have a standard length corresponding with the standard lengths offered by the pipe manufacturer in his catalogue, with a maximum permissible variation in length of $\pm 2\%$.

A pipe that is a shorter or longer than the defined standard will be rejected by the Engineer, except when such non-standard lengths are required in terms of the Contract and have been specifically manufactured or cut as such by the pipe manufacturer or supplier."

PSL 3.4: Steel pipes, fittings and specials

PSL 3.4.2: Pipes of nominal bore up to 150mm

Add the following:

"The pipes shall be 'normalized' or seamless steel pipes and shall be used with malleable cast-iron fittings complying with the requirements of SANS 509."

PSL 3.4.4: Fittings and Specials

Add the following:

"Fire hydrants will comply with the following:

- (a) They will be suitable for working pressure of 16 kPa (16 Bar)
- (b) Flanges will be raised face and drilled to SANS 1123, table 1000-3 or BS 4504, Table 10
- (c) Inside diameters will be 80mm
- (d) Stopper mechanism will be of mushroom type encapsulated with EPDM rubber (flat type stopper fitted with a nylon or flat rubber washer is not acceptable)
- (e) Spindles will be right hand closing, non-rising type and fitted with cap tops
- (f) An electronic epoxy coated to DIN 30677 internally and externally as surface protection will be applied
- (g) Bayonets will be fitted with a dust cap, which will be attached to the body by means of a cable, chain or strap
- (h) Material utilized in the manufacturing of hydrants will be as follows:

Ductile iron (BS 2789, grade 500 – 7) Body and bonnet

Cast iron (BS 1452, grade 220 : 225)

Cap and bayonet

Stainless steel (DIN x 20 Cr 13) Stem

NBR rubber All "O" rings

EPDM rubber Stopper rubber

Gun metal (BS 1400, LG 2-C) or dezinctified resistant

Spindle and nut

brass

Stainless steel

All washers, clamps, circlips

and seat screws

Prepaid water meters will comply with the following:

- (a) SABS approved
- (b) Flow range of 16 litres/hour to 5000 litres/hour
- (c) Pressure range 0.2 bar to 16 bar
- (d) A data logger that is capable of retaining 3000 hourly readings with First data In First data Out (FIFO) criteria
- (e) Battery life: 7 years minimum.
- (f) IP68 Waterproof rating"

PSL 3.7: Other types of pipes

PSL 3.7.2: Polyethylene pipes

Replace the contents of this subclause with the following:

"Polyethylene pipes shall be HDPe PE 63 PN 10 or 16 pipes with compression fittings and shall comply with SANS 533 Part II."

Add the following subclause:

PSL 3.8.3: Flanges and accessories

Add the following subclause:

"Unless otherwise specified all flanges shall comply with table 1 000/3 of SANS 1123."

PSL 3.9: Corrosion protection

PSL 3.9.6: Corrosive soil

Add the following:

"Where shown on the drawings, steel pipes and fittings in contact with corrosive soil shall be wrapped with Densopol 80 HT or an equivalent approved product, strictly in accordance with the manufacturer's instructions."

Nominal bore steel pipes and fittings up to 150mm shall be coated through a hot-dip galvanized process in accordance with SANS 763.

The provision of corrosion protection as well as painted pipework must be included in the relevant rates for pipework.

PSL 3.9.7: Coatings and lining for gate valves

The coating and lining of gate valves shall be of a polyamide-cured epoxy system as specified in subclause 3.9.2.2 (b) (2).

The contractor must supply to the Engineer the suppliers' test inspection sheets and reports in support of the specified coatings or linings provided."

PSL 3.10: Valves

Replace the contents of this subclause with the following:

PSL 3.10.1: Gate valves

Valves shall comply with the following requirements:

- (a) Be AVK valves or similar approved to suit specifications
- (b) Be resilient seal gate valves
- (c) Close clockwise
- (d) Have a non-rising spindle and fitted with a cap top
- (e) Be class 16 valves and comply with the requirements of SANS 664:1974
- (f) Flanges of valves will be drilled to the nominal pressure class of BS 4504 Table 10 or SANS 1123 Table 1000-3
- (g) Be highly resistant to corrosion and abrasion
- (h) Have parts manufactured from the following materials:

Spheroidal graphic iron Body gate, bonnet and hand wheel

Stainless steel Spindle

Plastic Bush, friction rings

Nitrite rubber All "O" rings, profile ring, scraper ring and sealing ring

Bronze Spindle nut

(i) All receive an electrostatic epoxy powder coating as surface protection – internal and external."

PSL 5: CONSTRUCTION

PSL 5.1.2: Damage

Add the following paragraph:

"No uPVC pipe may be stored in direct sunlight for any period of time. Any pipes with discolouration due to exposure to sunlight will be removed immediately from site by the contractor and must be replaced at his own cost."

PSL 5.6: Valve and hydrant chambers

PSL 5.6.1: General

Replace the words "drawing L-1" in the second line with "the drawings".

PSL 5.6.2: Construction of chambers

Replace the words "drawing L-1, L-2 and L-3" in the fourth line with "the drawings".

Add the following subclauses:

PSL 5.12: Marker blocks

Marker blocks shall be manufactured and positioned as shown on the drawings.

PSL 7: TESTING

PSL 7.3.1: Test pressure and time of test

PSL 7.3.1.2

The maximum working pressure for the different pipes is indicated by the class of the pipe.

PSL 8: MEASUREMENT AND PAYMENT

PSL 8.2: Scheduled items

PSL 8.2.5: Supply and place pipes, valves and specials Unit: No

Add the following to the description of the payment items:

No extra payment over and above the rates will be made in respect of any additional cutting, turning and jointing of pipes, valves and specials required for their location in the positions as given on the drawings.

Unless specific provision is made in the schedule, no separate payment will be made for the supply and fitting of any additional joints and jointing materials which may be required for the placing of the pipes, valves and specials.

Replace the contents of this clause with the following:

The Biddered rate shall cover the costs for labour, material and plant as well as for excavating, trimming, formwork, class 15 MPa/19mm concrete and finishing of the top surfaces of all the thrust blocks required under the item, the number of which is given in the item description and dimensions for which are given on the drawings.

The Biddered rate shall include the wrapping of uPVC pipes and fittings with Densopol 80 or a similar approved material where the pipes and fittings come into contact with concrete."

Add the following to the description of the payment items:

(j) The unit of measurement is the No. of water meter chamber or fire booster station all inclusive as shown on the drawings measured between the uPVC/MS flange adaptors (adaptors measured separately) on both sides of the chamber or booster station.

The Biddered rate shall include full compensation for the manufacture, supply, delivery, installation of all pipework and necessary couplings and fittings, meters, valves and equipment, excavation and backfilling of foundations and footings, removal of surplus material, brickwork, plaster and concrete, reinforcement, formwork where required, covers and frames, loose concrete aggregate on booster station floor, testing of facilities, all labour, as well as plant necessary to complete the units as shown on the relevant drawings and details.

Add the following items:

The unit of measurement is the No. of connections of different types and road reserve widths scheduled separately as follows:

Type 1 Short: - denotes a <u>single connection</u> where the water main is on the same side of the erf.

Type 1 Long: - denotes a single connection where the water main is on the other side of the erf.

Type 2 Short: - denotes a <u>double connection</u> where the water main is on the same side of the erf.

Type 2 Long: - denotes a <u>double connection</u> where the water main is on the other side of the erf.

A distinction was also made for erf connections to new water mains and connecting to existing water mains.

The Biddered rate shall cover the cost of all labour and plant required, the provision of the pipes complete with all necessary couplings and fittings, stop valves, bends, reducers, end cap, etc., the costs of handling, inspecting, transporting, excavation, backfilling and compaction, removal of surplus material, bedding, laying, jointing, cutting, testing and disinfecting of the pipes and joints as well as the saddles.

PSL 8.2.18: Water Markers (Valves)

Unit: No.

The unit of measurement is the No. of water markers.

The Biddered rate shall include full compensation for the manufacture, supply, delivery, installation, excavation, backfilling and compaction, removal of surplus material, all labour, materials and plant required.

PSL 8.2.19: Connection to existing main supply pipe (200mm Dia.)

Unit: number

The Biddered rate shall include full compensation for the cost of excavation, cutting existing water main, connection to existing main supply pipe of given diameter, removal of surplus material, all labour as well as equipment necessary to make the connection and all liaison with the local authorities." Only the T-piece and repair coupling are measured separately. Any other incidental materials shall be deemed to be covered in this rate.

PSLB: BEDDING (PIPES)

PSLB 3: MATERIALS

PSLB 3.1: Selected granular material

Replace the contents of this subclause with the following:

"Selected granular material shall have a PI not exceeding 6 and shall be free from sharp-edged particles exceeding 19 mm."

PSLB 3.3: Bedding

Add the following:

"uPVC and HDPe pipes are deemed to be flexible pipes for the purposes of this subclause."

PSLB 3.4: Selection

PSLB 3.4.1: Suitable material available from trench excavation

Replace the words "(but is not required)" in the fifth line with the words "(at his own cost)".

PSLB 8: MEASUREMENT AND PAYMENT

PSLB 8.1: Principles

PSLB 8.1.5: Disposal of displaced material

Replace the contents of this sub clause with the following:

"Material displaced by the pipeline and by imported material from sources other than trench excavation, shall be disposed of at an approved site to be furnished by the contractor. No haulage shall be payable for transporting such material."

PSLB 8.1.6: Free-haul

Delete the words "of 0,5 km" in the first line of this sub clause.

SITE PARTICULARS

SITE CONDITIONS

❖ Altitude: 764m above sea level
 ❖ Air temperature: maximum 35°C

❖ minimum 16°C

♦ average 25.5°C

❖ max. temperature variation: within 24 hours 16°C

Relative humidity: 46%

❖ Atmosphere: hot and dry

- ❖ The Contractor shall verify the ground conditions.
- All equipment positioned above ground is exposed to intensive direct radiation from the sun and temperature of 40°C may be reached in enclosures if there are not ventilated sufficiently.
- The Bidder shall satisfy him that all equipment offered is suitable for satisfactory operation under the specified site conditions.

SITE FAMILIARISATION

- ❖ Bidders will be briefed on the scope of the work and the site conditions at a briefing as per Conditions of Bid.
- Bidders are advised to acquaint themselves with the nature of the terrain where, and the circumstances where under, the work is to be executed. No claims from Bidders which may arise from the insufficient knowledge of site location and access, types and layout of sites, establishment, transport and loading/off-loading facilities, power and water supply, etc. will be considered after the Bid has closed.

CONTRACTOR'S SITE

- For the duration of the contract the Contractor shall have a site office and camp at a convenient location within his contract area. The minimum size of the site office shall be 6m x 4m x 2.5m, and the office shall be suitably furnished such that site meetings may be held there. The Contractor shall provide telephone and facsimile facilities at his site office that may be used by the Engineer. No site facilities for the Engineer and his staff are required.
- The Contractor shall make his own arrangements, at his own expense, for the site office and camp, and for the provision of power, water, accommodation and transport of employees and ablution facilities. Toilets shall be provided at the rate of one for every fifteen persons, and the Contractor shall make his own arrangements and pay all charges for the removal of sewerage. The sanitary facilities shall be maintained in a clean, orderly and sanitary condition to the satisfaction of the Engineer and the health authorities.
- The site must be kept clean and tidy, and on completion of the works the Contractor shall remove all temporary offices, sheds, etc. and shall reinstate the camp site to the Engineer's satisfaction.
- The Contractor shall at all times store materials and equipment for which he is responsible

in an orderly manner, and keep the premises free from debris and obstruction. It is the responsibility of the Contractor to ensure the safety of all materials on site: no claims for theft of nor damage to materials on site shall be considered.

SAFETY

- The Contractor shall observe proper and adequate safety measures and precautions on the site at all times in accordance with Machinery, Building, Demolition and Excavation Work Regulations (framed under the Factories, Machinery and Building Work Ordinance of 1952 as amended) Chapter III Part 3 and Chapter IV Clause D16. Labour Act of 1992 (Act 6 of 1992) Part XI
- These documents shall at all times be available at the Contractor's site office. Where adequate safety measures and precautions are not observed, the Engineer may order the Contractor to comply with minimum safety requirements at the Contractor's expense, and compliance with such an order will not absolve the Contractor from any of his responsibilities and obligations under the Contract.
- The Contractor shall provide a properly equipped first aid box which shall be accessible at all times. Symbolic safety signs shall comply with the applicable requirements of SABS 1186
- Safety Specifications are provided hereunder.

HEALTH AND SAFETY

HEALTH & SAFETY SPECIFICATIONS FOR CONSTRUCTION

ERONGO REGIONAL COUNCIL

REPLACEMENT OF BULK WATER PIPELINE FOR A DISTANCE OF 3KM IN UIS SETTLEMENT AREA, ERONGO REGION.

PROCUREMENT REFERNENCE: W/ONB/ERC -002/2024/2025

This specification shall be used in conjunction with all other applicable safety specifications, legislation and regulations in force at the time of the contract. Where unique site specifications are in force, those site specifications shall take precedence over this specification.

Definitions:

Occupational Health & Safety Specification: means a documented specification of all occupational health & safety requirements pertaining to the associated works on a construction site, so as to ensure the health & safety of persons.

Client: means any person for whom construction work is being performed.

Act: means the Namibian Advanced OH&S Act or regulations in accordance with the Regulations Relating to the Health and Safety of Employees at Work as per Government Notice 156 in Government Gazette 1617 of August 1997(issued in terms of the Labour Act, 6 of 1992 which has since been repealed by the Labour Act, 11 of 2007), as amended from time to time.

Abbreviations:

OH&S means Occupational Health and Safety

Occupational Health and Safety Act

Occupational Health and Safety Specifications

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	4.6	Use and temporary storage of flammable liquids on construction sites		
	4.7	Good Housekeeping on construction sites		
	4.8	Stacking and storage on construction sites		
	4.9	Fire precautions on construction sites		
	4.10	Transport of Workers		
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1. INTRODUCTION

1.1 Scope

This Specification covers the requirements for preventing incidents and accidents and eliminating injuries on the *Replacement of Bulk Water Pipeline for a Distance Of 3km In Uis Settlement Area, Erongo Region.* The specification will provide the requirement that Principal Contractor and Sub-contractors will have to comply with in order to reduce the risks associated with the above mentioned contract work that may lead to incidents causing injury and/or ill health, damage to property, equipment and the environment to a level as low as reasonably practicable.

1.2 Preamble

Every effort has been made to ensure that this Specification is accurate in all respects; however, should it contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time.

1.3 Purpose

The purpose of this Specification is to brief contractors on the significant safety aspects of the project. It provides information and requirements on inter alia:

- ✓ Safety considerations affecting the site and its environment;
- ✓ Health and safety aspects of the associated structures and equipment;
- ✓ Submissions on health and safety matters; and
- ✓ The Principal Contractor's health and safety plan.

1.4 Interpretations

Occupational Health and Safety Act, shall apply to this contract and to any person involved in construction work.

Construction work is defined as any work in connection with:

- ✓ The erection, maintenance, renovation, repair, demolition or dismantling of or addition to a building or to any similar structure;
- ✓ The installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- ✓ The construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- ✓ The moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work.

2. ADMINISTRATION

2.1 Legal Requirements

All Contractors entering into a Contract with THE CLIENT shall, as a minimum, comply with the-

✓ Occupational Health & Safety Act and Regulations. A current, up-to-date copy of the OHS Act must be available on site at all times.

✓ The Principal Contractor shall notify the Provincial Director of the department of Labour in writing before construction work commences. A copy of this notification and proof of submission must be held in the Safety file on site.

2.2 Health and Safety Policy

- 1) The contractor shall prepare a written policy concerning the protection of the health and safety of his employees at work, including a description of the organization and the arrangements for carrying out and reviewing that policy.
- 2) The contractor shall prominently display a copy of the policy referred to in point 1, signed by the Chief Executive Officer, in the workplace where his employees normally report for service and keep a copy in the safety file.

2.3 Further (Specific) Supervision Responsibilities for OH&S

- 1) Depending on the activities associated with the Construction work, the Contractor shall appoint designated competent employees and/or other competent persons as required by the Act and Regulations.
- 2) The appointments must be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information must be communicated and agreed with the appointees.
- 3) Copies of appointments must be submitted to THE CLIENT together with concise CV's of the appointees. THE CLIENT must officially approve all appointments and any changes in appointees or appointments must be communicated to THE CLIENT forthwith.
- 4) The Principal Contractor must, furthermore, provide THE CLIENT with an organogram or schedule of all Contractors that he/she has appointed or intends to appoint and keep this record updated on a weekly basis.
- 5) Where necessary, or when instructed by THE CLIENT or an Inspector of the Department of Labour, the Principal Contractor must appoint a competent OH&S Officer subject to the approval of THE CLIENT.
- 6) The Principal Contractor must ensure that the site is safe at all times and that unauthorized entry is prevented by fencing off the site. Dangerous areas must be barricaded with a solid barricade.

2.4 Designation of OH&S Representatives

Where the Principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-contractors) he has to appoint one OH&S Representatives for every 50 employees or part thereof. It is required that the appointment or election and subsequent designation of the OH&S Representatives be executed in consultation with Employee Representatives or Employees.

OH&S Representatives have to be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

2.5 Risk Assessment

- Every contractor performing construction work shall before the commencement of any construction work and during construction work, cause a risk assessment to be performed by a competent person appointed in writing and the risk assessment shall form part of the health and safety plan to be applied on the site and shall include at least
 - a) The identification of the risks and hazards to which persons may be exposed to;
 - b) The analysis and evaluation of the risks and hazards identified
 - c) A documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified.
 - d) A monitoring plan; and
 - e) A review plan.
- 2) A contractor shall ensure that a copy of the risk assessment is available on site for inspection by an inspector, client, client's agent, contractor, employee, representative trade union, health and safety representative or any member of the health and safety committee.
- 3) Every contractor shall consult with the health and safety committee or, if no health and safety, committee exists, with a representative group of employees, on the development, monitoring and review of the risk assessment.
- 4) A contractor shall ensure that all employees under his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.
- 5) A principal contractor shall ensure that all contractors are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such times as may be determined in the risk assessment.
- 6) A contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analyzed, evaluated and addressed in the risk assessment.
- 7) No contractor shall allow or permit any employee or person to enter any site, unless such employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.
- 8) A contractor shall ensure that all visitors to a construction site undergoes health and safety induction pertaining to the hazards prevalent on the site and shall be provided with the necessary personal protective equipment.
- 9) Every employee on the shall
 - a) Be in possession of proof of the health and safety induction training, issued by a competent person prior to the commencement of construction work; and
 - b) Carry the proof contemplated in paragraph (a) for the duration of that project or for the period that the employee will be on the construction site.

2.6 Incident/Accident Investigation and Reporting

- 1) Investigate each incident, accident or near miss occurring at work or arising out of or in connection with the activities of persons at work, or in connection with the use of plant or machinery.
- 2) Any incident/accident at the workplace in which any person is injured to the extent that death results, or a limb or part of a limb is lost, or the injury is such that the person is likely to die or suffer permanent disability, or that for a period of at least fourteen days the person is unable to continue with the activity with which he was busy at the time of the incident/accident, or if a person becomes unconscious because of heat stroke, exhaustion or exposure to any hazard at the workplace, then this is required to be reported to the inspector.

2.7 Emergency Procedures

The Principal Contractor must prepare a detailed emergency Procedure. The procedure must include the following:

- List of key competent personnel
- Details of emergency services
- Actions to be taken in the events of an emergency.

Emergency Procedures shall include, but is not limited to:

- i. major incidents/accidents,
- ii. injury to employees,
- iii. damage to property/equipment/plant,
- iv. incidents involving hazardous substances &,
- v. Fires floods

The Principal Contractor shall advise the Client in writing forthwith, of any emergency, together with a record of action taken. A contact list of Fire department, Ambulance, SAPD, Hospital and contractors contact person must be maintained, available and displayed on site.

2.8 First Aid

- 1) The Principal Contractor must provide First Aid equipment (including a stretcher) and have qualified First Aider/s.
- 2) The Contingency Plan of the Principal Contractor must include the arrangements for speedily and timeously transporting injured/ill person/s to a medical facility or of getting emergency medical aid to person/s that may require it.
- 3) The Principal Contractor must have firm arrangements with his other Contractors in place regarding the responsibility of the other Contractors injured/ill employees.

2.9 Personal & Other Protective Equipment

The Contractor is required to identify the hazards in the workplace and deal with them.
He must either remove them or, where impracticable take steps to protect workers and
make it possible for them to work safely and without risk to health under the hazardous
conditions.

- 2) Personal Protective equipment (PPE) should, however, be the last resort and there should always first be an attempt to apply engineering and other solutions to mitigating hazardous situations before the issuing of PPE is considered.
- 3) Where it is not possible to create an absolutely safe and health workplace the Principal Contractor is required to inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.
- 4) It is a further requirement that the said equipment be maintained by the Contractor, that he instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s.
- 5) Employees do not have the right to refuse to use/wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other reason, the employee cannot be allowed to continue working under the hazardous condition/s for which the equipment was prescribed but an alternative solution has to be found that may include relocating or discharging the employee.
- 6) The Contractor may not charge any fee for protective equipment prescribed by him/her but may charge for equipment under the following conditions:
 - a) Where the employee requests additional issue in excess of what is prescribed.
 - b) Where the employee has patently abused or neglected the equipment leading to early failure.
 - c) Where the employee has lost the equipment.
- 7) All employees shall, as a minimum, be required to wear the following PPE on any of THE CLIENT'S projects:
 - Protective overalls.
 - Protective footwear.
 - Protective headwear.
 - Eye/face protection.
 - Hand protection
 - Hearing Protection

2.10 Training

- 1) All employees of the Principal and other Contractors to be in possession of proof of General Induction training.
- 2) All operators, drivers and users of construction vehicles, mobile plant and other equipment to be in possession of valid proof of training
- 3) The Principal Contractor shall ensure that his and other Contractors personnel appointed are competent and that all training required doing the work safely and without risk to health, has been completed before work commences.
- 4) The Principal Contractor shall ensure that follow-up and refresher training is conducted as the contract work progresses and the work situation changes.
- 5) Records of all training must be kept on the OH&S File for auditing purposes.

2.11 Audits by Client

- 1) THE CLIENT will be conducting a Monthly Audit to ensure that the principal Contractor has implemented and is maintaining the agreed and approved OH&S Plan.
- 2) THE CLIENT reserves the right to conduct other ad hoc audits and inspections as deemed necessary. This will include Site Safety Walks.
- 3) A representative of the Principal Contractor must accompany THE CLIENT on all Audits and Inspections and may conduct his/her own audit/inspection at the same time. Each party will, however, take responsibility for the results of his/her own audit/inspection results.
- 4) The Principal Contractor is to conduct his own monthly internal audits to verify compliance with his own OH&S Management system as well as of with this specification.
- 5) OH/&S Representatives must conduct weekly inspections of their areas of responsibility and report thereon to their foreman or supervisor whilst other appointees must conduct inspections and report thereon as specified in their appointments e.g. vehicle, plant and machinery drivers, operators and users must conduct daily inspections before start-up.
- 6) All the results of the above-mentioned inspections to be in writing, reviewed at OH&S committee meetings, endorsed by the chairperson of the meeting and placed on the OH&S File.
- 7) Principal Contractor is required to provide the Client with a monthly report.

3. CONSTRUCTION

3.1 Client

- 1) The Client will legally appoint the Principal Contractor in writing for the execution of the works.
- 2) The Client will take reasonable steps to ensure that the Principal contractor's health and safety plan is implemented and maintained. The steps taken will include periodic audits at intervals of at least once a month.
- 3) The Client or his representative/Principal agent will stop the contractor from executing construction work should the contractor at any stage in the execution of the works;
 - a) Fail to implement or maintain his health and safety plan;
 - b) Execute construction work which is not in accordance with his health and safety plan;
 - c) Act in any way, which may pose a threat to the health and safety to persons, damage to property/equipment or the environment.

3.2 Principal Contractor

A principal contractor shall provide and demonstrate to the client a suitable and sufficiently
documented health and safety plan, based on the client's documented health and safety
specifications, which shall be applied from the date of commencement of and for the
duration of the construction work.

- 2) A principal contractor shall take reasonable steps as are necessary to ensure co-operation between all contractors to enable each of those contractors to comply with the provisions of these regulations.
- 3) A principal contractor shall be responsible for the following in order to ensure compliance with the provisions of the Act
 - a) to provide any contractor who is making a bid or appointed to perform construction work for the principal contractor, with the relevant section of the health and safety specifications pertaining to the construction work which has to be performed;
 - b) to appoint each contractor contemplated in paragraph (a)in writing for the part of the project on a construction site;
 - c) to take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site: Provided that the steps shall include periodic audits at intervals mutually agreed upon between the principal contractor and contractor(s), but at least once every month;
 - d) to stop any contractor from executing construction work, which is not in accordance with, the principal contractor's and/or contractor's health and safety plan for the site or which poses a threat to the health and safety of persons;
 - e) to ensure that where changes are brought about to the design and construction, sufficient health and safety information and appropriate resources are made available to the contractor to execute the work safely
 - f) to ensure that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site; and
- g) To ensure that potential contractors submitting tenders have made provision for the cost of health and safety measures during the construction process.
- 4) A contractor shall provide and demonstrate to the principal contractor a suitable and sufficiently documented health and safety plan, based on the relevant section of the principal contractor's health and safety specification provided by the principal contractor, which plan shall be applied from the date of commencement of and for the duration of the construction work.
- 5) A principal contractor shall discuss and negotiate with the contractor the contents of the health and safety, plan and shall finally approve that plan for implementation.
- 6) A principal contractor shall ensure that a copy of his or her health and safety plan, as well as the contractors' health and safety plan is available on request to an employee, inspector, contractor, client or client's agent.
- 7) Every contractor shall ensure that a health and file, which shall include all documentation, required in terms of the provision of the Act and these Regulations, is opened and kept on site and made available to an inspector, client, client's agent or principal contractor upon request.
- 8) A principal contractor shall hand over a consolidated health and safety file to the client upon completion of the construction work and shall include a record of all drawings, design, materials used and other similar information concerning the completed structure.
- 9) A principal contractor shall ensure that in addition to the documentation required in the health and safety file, a comprehensive and updated list of all the contractors on site

- accountable to the principal contractor, the agreements between the parties and the type of work being done are included and available.
- 10) No principal contractor shall appoint a contractor to perform construction work unless the principal contractor is reasonably satisfied that the contractor he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely.
- 11) Where a contractor appoints another contractor to perform construction work, the responsibilities as that apply to the principal contract or shall apply to the contractor as if he or she were the principal contractor.
- 12) No contractor shall appoint another contractor to perform construction work unless he or she is reasonably satisfied that the contractor he or she intends to appoint has the necessary competencies and resources to perform the construction work safely.
- 13) Contractors shall co-operate with the principal contractor as far as is necessary to enable each of them to comply with the provisions of the Act.
- 14) Every contractor shall as far as is reasonably practicable, promptly provide the principal contractor with any information which might affect the health and safety of any person at work carrying out construction work or any person who might be affected by the work of such a person at work or which might justify a review of the health and safety plan.
- 15) If the number of employees employed by the CONTRACTOR in term of this contract exceeds 20(twenty), the CONTRACTOR shall within 14 (fourteen) days of the commencement of the contract work provide the CLIENT with full particulars of the safety representatives at the contract work. The CONTRACTOR shall simultaneously confirm that it complied the Act in the appointment of the safety representatives and that such health and safety representatives received the necessary facilities, assistance and training to fulfil their duties and functions as health and safety representatives.
- 16) If there are two or more health and safety representatives involved in the contract works, the CONTRACTOR shall, within 7 (seven) days from the date of a meeting of such health and safety representatives ,send a copy of the minutes of such a meeting ,as well as a copy of any recommendation made by the health and safety committee.
- 17) The CONTRACTOR shall not make any deduction from any employee's remuneration or require or permit any employee to make any payment to him or her or any other person in respect of anything which the CONTRACTOR is in terms of the Act, or this contract, required to provide or to do in the interest of the health and safety of any employee on the contract works.
- 18) The CONTRACTOR shall immediately report to the CLIENT any incidents occurring at the place or places where the CONTRACTOR performs any work in terms of this contract, in which or in consequence of which:
 - (a) any person dies ,becomes unconscious, suffers the loss of a limb or part of a limb or is otherwise injured or become ill to such a degree that he or she is likely either to die or to suffer a permanent physical defect or is likely to be unable for a period of at least 14(fourteen) days either to work or to continue with the activity for which such employee was employed or is usually employed;
 - (b) occurrence of catastrophic proportions, as defined in the Act and resulting from the use of plant or machinery or from any activity in the performance of this contract;

- (c) the health or safety of any person was endangered and where:
 - (i) the uncontrolled release of any substance or pressure took place;
 - (ii) machinery or any part thereof fractured or failed, resulting in flying, falling or uncontrolled moving objects; or
 - (iii) machinery ran out of control.

3.3 Supervision of construction work

- 1. The contractor shall appoint a full-time competent employee in writing as the construction supervisor with the duty of supervising the construction work.
- 2. The contractor may in writing appoint one or more competent employees to assist the appointed construction supervisor, and every such employee shall, to the extent clearly defined by the contractor in the letter of appointment, have the same duties as the construction supervisor: provided that the designation of any such employee shall not relieve the construction supervisor of any personal accountability for failing in his supervisory duties referred to in terms of this regulation.
- 3. Where the contractor has not appointed an employee, or in the opinion of an inspector, not a sufficient number of such employees, that inspector may require the employer to appoint the number of employees indicated by the inspector.
- 4. No construction supervisor appointed shall supervise any construction work on or in any construction site other than the site in respect of which he or she has been appointed: provided that a sufficient number of competent employees have been appropriately designated on all the construction sites, the appointed construction supervisor may supervise more than one site.
- 5. If, however, the construction supervisor appointed for more than one construction site will not, in the opinion of an inspector, be able to supervise the works favourably, an inspector may require the contractor to appoint the required number of employees to assist the appointed construction supervisor or instruct the contractor to appoint the construction supervisor who had been appointed more appropriately.
- 6. A contractor shall upon having considered the size of the project, the degree of dangers likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction safety officer in writing to assist in the control of all safety related aspects on the site: Provided that, where the question arises as to whether a construction safety officer is necessary, the decision of an inspector shall be decisive.
- 7. The appointed constructions safety officer shall as far as is reasonably practicable be utilised to give input at the early design stage and where not appointed at this stage, he or she shall be given the opportunity to input into the health and safety plan when wanting to do so, and a record of such shall be kept in the health and safety file.
- 8. No contractor shall appoint a constructions safety officer to assist in the control of safety related aspects on the site unless he or, she is reasonably satisfied that the construction safety officer he or she intends to appoint has the necessary competencies and resources to assist the contractor.
- 9. The contractor must ensure that the required inspections are conducted and records kept and that the safety file is kept up to date.

3.4 Fall Protection and Working in Elevated Positions

- 1) A contractor will designate a competent person, responsible for the preparation of a fall protection plan.
- 2) Implement amend where and when necessary and maintain the fall protection plan as required.
- 3) Take steps in order to ensure the continued adherence to the fall protection plan
- 4) The fall protection plan will include a risk assessment of all work carried out from an elevated position which shall include the procedures and methods used to address all the risks identified per location.
- 5) Employees working at elevated positions are physically and psychologically fit by being in possession of a medical certificate of fitness.
- 6) Employees are trained to work from elevated positions and records are kept.
- 7) Fall protection equipment is inspected, tested and maintained and records kept.
- 8) As far as is practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least as safe as if he/she is working at ground level and whilst working in this position will use fall protection equipment suitable and of sufficient strength for the purpose or purposes for which it is being used having regard to the work being carried out and the load, including any person, it is intended to bear.
- 9) Ensure the fall protection equipment is securely attached to a structure and the attachment thereto is suitable and of sufficient strength and stability for the purpose of safety supporting the equipment and any person who is liable to fall.
- 10) Alternatively, any platform, slab, deck or surface forming an edge over which a person may fall may be fitted with guard rails with horizontal rails at two different heights as prescribed in SABS 0885: Code of Practice for the Design, Erection, Use and Inspection of Access Scaffolding.

3.5 Scaffolding

- 1) Every contractor using access scaffolding shall ensure that such scaffolding, when used, complies with the safety standards incorporated for this purpose into these Regulations under section 44 of the Act.
- 2) A contractor shall ensure that all scaffolding work operations are carried out under the supervision of a competent person who has been appointed in writing and that all scaffold erectors, team leaders and inspectors are competent to carry out their work.

3.5.1 Scaffold Framework

- 1. An employer shall ensure that
 - a) Scaffold standards are properly propped against displacement and are secured vertically on firm foundations: Provided that putlog scaffolds shall incline slightly towards the structure;
 - b) The following must be adhered:
 - i. Steel scaffold standards with "heavy"," medium"," light", or "very light" platform loadings which shall not exceed 320,240,160 and 80 kg/m², respectively, are spaced not more than 1,8 m, 2 m, 2,5 m and 3 m apart, respectively; and

- ii. Wooden scaffold standards are spaced not more than 3 m apart;
- c) Ledgers are spaced vertically not more than 2,1 m apart;
- d) Putlogs or transoms
 - i. Which do not support a platform, are spaced at the same distances as the distances prescribed in paragraph in respect of scaffold standards;
 - ii. which support a platform, are spaced not more than 1,25 m apart if the platform is constructed of solid timber boards; and
- e) Every part of a wooden scaffold frame has a diameter of at least 75 mm or a section of similar strength.
- 2. No employer shall require or permit it to be used unless it
 - a) Is securely and effectively braced to ensure stability in all directions;
 - b) Is secured at suitable vertical and horizontal distances to the structure to which work is being done, unless it is designed to be completely free-standing;
 - c) Is so constructed that it has a throughout factor of safety of at least two; and
 - d) Is inspected at least once a week and every time after bad weather by a person who has adequate experience in the erection and maintenance of scaffolds, and all findings are recording in a register or report book.
- 3. No employer shall require or permit that
 - a) A scaffold with a supporting wooden framework exceeds a height of 10m; and
 - b) A scaffold is erected, altered or dismantled by or under the supervision of a person other than a person who has had the necessary training and experience of such work and who has been appointed by the employer in writing for this purpose.

3.5.2 Scaffold Platforms

- 4. An employer shall ensure that
 - a) Every plank of a solid wooden scaffold platform is at least 275 mm wide and 38 mm thick;
 - b) Every plank which forms part of a scaffold platform is supported at distances not exceeding 1,25 m, and its ends are projected not less than 70mm and not more than 200 mm beyond the last prop;
 - c) Every plank of a scaffold platform is firmly secured to prevent its displacement; and
 - d) Every platform is so constructed as to prevent materials and tools from falling through.
- 5. An employer shall ensure that every scaffold platform
 - a) With "heavy", "medium", "light" or "very light" platform loading is not less than 1 125 mm and not more than 1 380 mm, not less than 1 125 mm and not more than 1150 mm, not less than 900 mm and not more than 1 150 mm, and not less than 675 mm and not more than 1 150 mm, respectively, wide: Provided that where a platform is used only as a gangway, a platform width of 450 mm shall be sufficient;
 - b) Which is more than 2m above the ground is on all sides, except the side facing the structure, provided with
 - i. Substantial guard rails of at least 900 mm and not exceeding 1000 mm in height; and

- ii. Toe-boards which are at least 150 mm high from the level of the scaffold platform and so affixed that no open space exists between the toe-boards and the scaffold platform: Provided that if the toe-boards are constructed of timber, they shall be at least 25 mm thick;
- c) Is not more than 75 mm from the structure: Provided that where workmen must sit to work, this distance may be increased to not more than 300 mm; and
- d) Is kept free of waste, projecting nails or any other obstructions, and is kept in a non-slip state.
- 6. Employer shall require or permit that a working platform which is higher than 3000 mm be supported on a scaffold platform, and shall provide an additional guard rail of at least 900 mm and not exceeding 1000 mm in height above every such working platform.
- 7. An employer shall ensure that convenient and safe access is provided to every scaffold platform, and where the access is a ladder, the ladder shall project at least 900 mm beyond the top of the platform.

3.5.3 Trestle Scaffolds

- 1) No employer shall use a trestle scaffold, or permit it to be used, unless
 - a) It is soundly constructed of solid material; and
 - b) All reasonable precautionary measures have been taken to prevent the unexpected spreading of its supporting legs when it is in use.
- 2) No employer shall use a trestle scaffold or permit it to be used, if it
 - a) Is higher than 3 m; or
 - b) Consists of more than two tiers.

3.6 Structures

- 1) The Principal Contractor must ensure that:
 - a) Steps are taken to ensure that no structure becomes unstable or collapses due to construction work being performed on it or in the vicinity of it.
 - b) No structure is overloaded to the extent where it becomes unsafe.
- 2) He/she has received from the designer the following information:
 - a) Information on known or anticipated hazards relating to the construction work and the relevant information required for the safe execution of the construction work.
 - b) A geo-scientific report (where applicable)
 - c) The loading the structure is designed to bear.
 - d) The methods and sequence of the construction process.
 - e) All drawings pertaining to the design are on site and available for inspection.

3.7 Formwork & Support Work

- 1) Formwork & Support work (F&SW) must be carried out under the supervision of a competent person designated in writing.
- 2) F&SW structures must be so designed, erected, supported, braced and maintained that it will be able to support any vertical or lateral loads that may be applied.

- 3) No load to be imposed onto the structure that the structure is not designed to carry. F&SW must be erected in accordance with the structural design drawings for that F&WS and, if there is any uncertainty, the designer must be consulted before proceeding with the erection.
- 4) All drawings pertaining to the F&SW must be kept available on site.
- 5) A competent person before use must check all equipment used in the erection of F&WS.
- 6) The foundation or base upon which F&SW is erected must be able to bear the weight and keep the structure stable.
- 7) Employees erecting F&SW must be trained in the safe work procedures for the erection, moving and dismantling of F&SW.
- 8) Safe access (and emergency escape) must be provided for workers.
- 9) A competent person must inspect F&SW structures that have been erected before, during and after pouring of concrete or any other load is applied and thereafter daily until the F&SW is stripped. The results of all inspections must be recorded in a register kept on site.
- 10) The F&SW must be left in place until the concrete has reached sufficient strength to bear its own weight and any additional weight that may be imposed upon it and not until the designated competent person has authorized its stripping in writing.
- 11) Any damaged F&SW must be repaired/rectified immediately.
- 12) Deck panels must be secured against displacement.
- 13) The slipping of persons on release agents on deck panels prevented; and
- 14) Persons' health must be protected against the use of solvents, oils or other similar substances.

3.8 Excavations

- Where excavations will exceed 1.5 m in depth the Contractor will be required to submit a
 Method Statement to THE CLIENT for approval before commencing with the excavation and
 THE CLIENT will issue a permit to proceed once the Risk Assessment and method statement
 is approved.
- 2) Excavation work must be carried out under the supervision of a competent person who has been appointed in writing.
- 3) Before excavation work begins, the stability of the ground must be evaluated.
- 4) Whilst excavation work is being performed, the contractor must take suitable and sufficient steps to prevent any person from being buried or trapped by a fall or dislodgement of material.
- 5) No person may be required or permitted to work in an excavation that has not been adequately shored or braced or where:
 - a) The excavation is in stable material or where,
 - b) The sides of the excavation are sloped back to at least the maximum angle of repose measured relative to the horizontal plane.
- 6) The shoring or bracing may not be left out unless written permission has been obtained from the appointed competent person and shoring and bracing must be designed and constructed to safely support the sides of the excavation.
- 7) Where uncertainty exists regarding the stability of the soil the opinion of a competent professional engineer or professional technologist must be obtained whose opinion will be decisive. The opinion must be in writing and signed by the engineer or technologist as well as the appointed excavator.

- 8) No load or material may be placed near the edge of an excavation if it is likely to cause a collapse of the trench unless suitable shoring has been installed to be able to carry the additional load.
- 9) Any neighbouring building, structure or road that may be affected or endangered by the excavation must be protected.
- 10) Every excavation must be provided with means of access that must be within 6 meters of any worker within the excavation.
- 11) The location and nature of any existing services such as water, electricity, gas etc. must be established before any excavation is commenced with and any service that may be affected by the excavation must be protected and made safe for workers in the excavation.
- 12) Every excavation including the shoring and bracing or any other method to prevent collapse must be inspected by the appointed competent person as follows:
 - a) Daily before work commences.
 - b) After every blasting operation.
 - c) After an unexpected collapse of the excavation.
 - d) After substantial damage to any supports.
 - e) After rain.
- 13) The results of any inspections must be recorded in a register kept on site.
- 14) Every excavation accessible to the public or that is adjacent to a public road or thoroughfare or that threatens the safety of persons, must be adequately barricaded or fenced to at least one meter high and as close to the excavation as practicable, and
- 15) Provided with warning lights or visible boundary indicators after dark or when visibility is poor.
- 16) Upon entering an excavation the requirements of General Safety must be observed:
 - a) Any confined space may only be entered after the air quality has been tested to ensure that it is safe to breath and does not contain any flammable mixture, or
 - b) The confined space has been purged and ventilated of any hazardous or flammable gas, vapour, dust or fumes, and
 - c) The safe atmosphere must be maintained, or
 - d) Employees have to be provided with breathing apparatus and wear safety harnesses attached to a rope with the free end of the rope being attended to by a person outside the confined space, furthermore,
 - e) An additional person trained in resuscitation to be in full-time attendance immediately outside the confined space, and
 - f) Additional breathing and rescue apparatus is kept immediately outside the confined space for rescue purposes.
 - g) All pipes, ducts etc. that may leak into the confined space to be blanked off sufficiently to prevent any leakage or seepage.
 - h) The employer must ensure that all employees have left the confined space after the completion of work.
 - i) Where flammable gas is present on a confined space no work may be performed in close proximity to the flammable atmosphere that may ignite the flammable gas or vapour.

3.9 Demolition Work

- 1) A contractor shall appoint a competent person in writing to supervise and control all demolition work on site.
- 2) A contractor shall ensure that prior to any demolition work being carried out, and in order also to ascertain the method of demolition to be used, a detailed structural engineering survey of the structure to be demolished is carried out by a competent person and that a method statement on the procedure to be followed in demolishing the structure is developed.
- 3) During the demolition, a competent person shall check the structural integrity of the structure at intervals determined in the method statement, in order to avoid any premature collapses.
- 4) Every contractor who performs demolition work shall
 - a) With regard to a structure being demolished, take steps to ensure that
 - i. No floor, roof or other part of the structure is overloaded with debris or material in a manner which would render it unsafe;
 - ii. All reasonably practicable precautions are taken to avoid the danger of the structure collapsing when ant part of the framing of a framed or partly framed building is removed, or when reinforced concrete is cut; and
 - iii. Precautions are taken in the form of adequate shoring or such other means as may be necessary to prevent the accidental collapse of any part of the structure or adjoining structure;
 - b) Not require or permit any person to work under unsupported overhanging material, which has not been adequately supported, shored or braced.
 - c) Take steps to ensure that any support, shoring or bracing contemplated in paragraph,(b) is designed and constructed so that it is strong enough to support the overhanging materials:
 - d) Where the stability of an adjoining building, structure or road is likely to be affected by demolition work on a structure, take such steps as may be necessary to ensure the stability of such structure or road and the safety of persons;
 - e) Ascertain as far as is reasonably practicable the location and nature of electricity, water, gas or other similar services which may in anyway, be affected by the work to be performed, and shall before the commencement of demolition work that may affect any such service, take the steps that may be necessary to render circumstances safe for all persons involved;
 - f) Cause every stairwell used and every floor where work is being performed in a building being demolished, to be adequately illuminated by either natural or artificial means;
 - g) Cause convenient and safe means of access to be provided to every part of the demolition site in which persons are required to work; and
 - h) Erect a catch platform or net above an entrance or passageway or above a place where persons work or pass under, or fence off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe where there is a danger or possibility of persons being struck by falling objects.
- 5) A contractor shall ensure that no material is dropped to any point, which falls outside the exterior walls of the structure, unless the area is effectively protected.
- 6) Waste and debris shall not be disposed from a high place by a chute unless the chute-

- a) Is adequately constructed and rigidly fastened;
- b) If inclined at an angle of more than 45 degrees to the horizontal, is enclosed on its sides;
- c) If of the open type, is inclined at an angle of less than 45 degrees to the horizontal;
- d) Where necessary, is fitted with a gate at the bottom end to control the flow of material; and
- e) Is discharged into a container or an enclosed area surrounded by barriers.
- 7) A contractor shall ensure that every chute used to dispose of rubble is designed in such a manner that rubble does not free-fall and that the chute is strong enough to withstand the force of the debris travelling along the chute.
- 8) A contractor shall ensure that equipment is not used on floors or working surfaces, unless such floors or surfaces are of sufficient strength to support the imposed loads.
- 9) Where the risk assessment indicates the presence of lead, a contractor shall ensure that all lead related work is conducted in accordance with the provisions.
- 10) Where the demolition work involves the use of explosives, a method statement is to be developed in accordance with the applicable explosives legislation, by an appointed person who is competent in the use of explosives for demolition work and the procedures therein are adhered to.
- 11) A contractor shall ensure that all waste and debris is as soon as reasonably practicable removed and disposed of from the site in accordance with the applicable legislation.

3.10 Water Environments

- 1) A contractor shall ensure that where construction work is done over or in close proximity to water, provision is made for
 - a) Preventing workers from falling into water; and
 - b) The rescuing of workers in danger of drowning.
- 2) A contractor shall ensure that where a worker is exposed to the risk of drowning by falling into the water, a lifejacket is provided to and worn by the worker.

3.11 Work in Confined Spaces

- 1) An employer or a user of machinery shall take steps to ensure that a confined space is entered by an employee or other person only after the air therein has been tested and evaluated by a person who is competent to pronounce on the safety thereof, and who has certified in writing that the confined space is safe and will remain safe while any person is in the confined space, taking into account the nature and duration of the work to be performed therein.
- 2) Where the provisions cannot be complied with the employer or user of machinery, as the case may be shall take steps to ensure that any confined space in which there exists or is likely to exist a hazardous gas, vapour, dust or fumes, or which has or is likely to have, an oxygen content of less than 20 per cent by volume, is entered by an employee or other person only when-
 - a) The confined space is purged and ventilated to provide a safe atmosphere therein and measures necessary to maintain a safe atmosphere therein have been taken;
 and

- b) The confined space has been isolated from all pipes, ducts and other communicating openings by means of effective blanking other than the shutting or locking of a value or a cock, or, if this is not practicable, only when all valves and cocks which are a potential source of danger have been locked and securely fastened by means of chains and padlocks.
- 3) Where the provisions cannot be complied with, the employer or user of machinery shall take steps to ensure that the confined space in question is entered only when the employee or person entering is using breathing apparatus of a type approved by the chief inspector and, further, that
 - a) Any employee or person entering the confined space is using a safety harness or other similar equipment, to which a rope is securely attached which reaches beyond the access to the confined space, and the free end of which is attended to by a referred to in paragraph (c)
 - b) At least one other person trained in resuscitation is and remains in attendance immediately outside the entrance of the confined space in order to assist or remove any person or persons from the confined space, if necessary; and
 - c) Effective apparatus for breathing and resuscitation of a type approved by the chief inspector is available immediately outside the confined space.
- 4) An employer or user of machinery shall take steps to ensure that all persons vacate a confined space on completion of any work therein.
- 5) Where the hazardous gas, vapour, dust or fumes are of an explosive or flammable nature, an employer or user of machinery shall further take steps to ensure that such a confined space is entered only if
 - a) The concentration of the gas, vapour, dust or fumes does not exceed 25 percent of the lower explosive limit of the gas, vapour, dust or fumes concerned where the work to be performed is of such a nature that it does not create a source of ignition; or
 - b) Such concentration does not exceed 10 percent of the lower explosive limit of the gas, vapour, dust or fumes where other work is performed.
- 6) The provisions of this regulation shall mutatis mutandis also apply, in so far as they can be so applied, to any work which is performed in any place or space on the outside of and bordering on or in the immediate vicinity of, any confined space, and in which place or space, owing to its proximity to the confined space, any hazardous article, oxygen-deficient atmosphere or dangerous concentration of gas, vapour, dust or fumes may occur or be present.

3.12 Public Safety and Awareness

- 1) Construction sites in built-up areas, adjacent to a public way, are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorised persons.
- 2) A catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under, or fence off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.

4. CONSTRUCTION EQUIPMENT

4.1 Tools and Equipment

4.1.1 Hand Tools

- 1) Each employer is responsible for the safe condition of tools and equipment used by employees.
- 2) Select the right tool for the job. Every hand tool has a purpose and proper selection will prevent misuse.
- 3) Maintain tools. Inspect tools regularly to be sure that they are in good condition and repair or discard broken, worn or damaged tools. Records must be kept.
- 4) Wooden handles of tools must be kept free of splinters or cracks.

4.1.2 Electrical Power Tools

- 1) Select the right tool for the job.
- 2) Maintain tools. Inspect tools regularly to be sure that they are in good condition. Records must be kept.
- 3) All portable electric tools that are damaged shall be removed from use and tagged "Do Not Use."
- 4) Electric tools should not be used in damp or wet locations.
- 5) Portable grinding tools need to be equipped with safety guards to protect workers not only from the moving wheel surface, but also from flying fragments in case of breakage.

4.1.3 Pneumatic Tools

- 1) Select the right tool for the job.
- 2) Maintain tools. Inspect tools regularly to be sure that they are in good condition. Records must be kept.
- 3) Air-hose. Hose and hose connections used for conducting compressed air to utilization equipment shall be designed for the pressure and service to which they are subjected.
- 4) Compressed air shall not be used for cleaning purposes.
- 5) Working with noisy tools such as jackhammers requires proper, effective use of hearing protection.

4.2 Cranes & Lifting Equipment

- 1) Cranes and lifting equipment must be designed and constructed in accordance with generally accepted technical standards and operated, used, inspected and maintained:
- 2) To be clearly and conspicuously marked with the maximum mass load (MML) that it is designed to carry safety. When the MML varies with the conditions of use, a table should be used by the driver/operator.
- 3) Each winch on a lifting machine must all time have, at least, three full turns of rope on the drum when the winch has been run to its lowest limit.
- 4) Fitted with a brake or other device capable of holding the MML. This brake or device to automatically prevent the downward movement of the load when the lifting power is interrupted.

- 5) Fitted with a load limiting device that automatically arrest the lift when the load reaches its highest safe position, or
- 6) When the mass of the load is greater than the MML.
- 7) Every chain or rope on a lifting machine that forms an integral part of the machine must have a factor of safety as prescribed by the manufacturer of the machine and where no standards is available the factor of safety must be:

Chains : 4(four)
Steel wire ropes : 5(five)
Fiber ropes : 10(ten)

- 8) Every hook or load attaching device must be designed such or fitted with a device that will prevent the load from slipping off or disconnecting every lifting machine must be inspected and load tested by a competent person every time it has been dismantled and re-erected and every 12 months after that. The load test must be in accordance with the manufacturer's prescription or to 110% of the MML.
- 9) In addition all ropes, chains, hooks or other attaching devices, sheaves, brakes and safety devices forming an integral part of a lifting machine must be inspected every 6 months by a competent person.
- 10) All maintenance, repairs, alterations and inspection results must be recorded in a log book and each lifting machine must have its own log book.
- 11) No person may be lifted by a lifting machine not designed for lifting persons unless in a cradle approved by the inspector of the Department of Labor.
- 12) Every jib crane with an MML of 5 000 kg or more at minimum jib radius must be provided with a load indicator or a load lifting limiting device.

4.2.1 Lifting Tackle

- 1) To be manufactured of sound material, well-constructed and free from patent defects,
- 2) To be clearly and conspicuously marked with id and MML.
- 3) Factor of safety:

Natural fiber ropes - 10(ten)

Man-made fiber-ropes & woven webbing - 06(six)

Steel wire ropes-single rope - 06(six)

Steel wire ropes-combination slings - 08(eight)

Mild steel chain - 05(five)

High tensile/alloy steel chains - 04(four)

4) Steel wire ropes must be discarded (not used any further for lifting purposes) when excessive wear and corrosion is evident and must be examined by a competent person every three months for this purpose and the results recorded.

4.2.2 Operator

1) Every lifting machine operator must be trained specifically for the type of lifting machine that he/she is operating.

- 2) Operators of jib cranes with a MML of 5 00 kg or more must be in possession of a certificate of training issued by an accredited (by The Department of Labour) training provider.
- 3) Are physically and psychologically fit to operate such lifting machine by being in possession of a medical certificate of fitness.

4.3 Construction Vehicles and mobile plant

- a) A contractor shall ensure that all construction vehicles and mobile plants
 - a) Are of an acceptable design or construction;
 - b) Are maintained in a good working order;
 - c) Are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
 - d) Are operated by workers who
 - i. Have received appropriate training and been certified competent and been authorized to operate such machinery; and
 - ii. Are physically and psychologically fit to operate such construction vehicles and mobile plant by being in possession of a medical certificate of fitness;
 - e) Have safe and suitable means of access;
 - f) Are properly organized and controlled in any work situation by providing adequate signalling or other control arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
 - g) Are prevented from falling into excavations, water or any other area lower than the working surface by installing adequate edge protection, which may include guardrails and crash barriers
 - h) Where appropriate, are fitted with structures designed to protect the operator form falling material or from being crushed should the vehicle or mobile plant overturn;
 - i) Are equipped with an electrically operated acoustic signalling device and a reversing alarm; and
 - j) Are on a daily basis inspected prior to use, by a competent person who has been appointed in writing and the findings of such inspection is recorded in a register.

b) A contractor shall furthermore ensure that-

- a) No person rides or is required or permitted to ride on any construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- b) Every construction site is organized in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;
- c) The traffic routes are suitable for the persons using them, sufficient in number, in suitable positions and or sufficient size;
- d) Every traffic route is, where necessary indicated by suitable signs for reasons of health or safety;
- e) All construction vehicles and mobile plan left unattended at night, adjacent to a freeway in normal use or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant;

- f) Bulldozers, scrapers, loaders, and other similar mobile plant are, when being repaired or when not in use, fully lowered or blocked with controls in a neutral position, motors stopped and brakes set;
- g) Whenever visibility conditions warrant additional lighting, all mobile plant is equipped with at least two headlights and two taillights when in operation.
- h) Tools and materials are secured in order to prevent movement when transported in the same compartment with employees.
- i) Vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and
- j) When workers are working on or adjacent to public roads, reflective indicators are provided and worn by the workers.

4.3.1 Hired Plant and Machinery

The Principal Contractor/Contractor shall ensure that any hired plant and machinery used on site is safe for use and complies with the minimum legislated requirements. The necessary requirements as stipulated by the OHS Act shall apply. The Principal Contractor shall ensure that operators hired with the plant/machinery are competent; in possession of a valid medical certificate of fitness and that, certificates are kept on site in the Safety file. Any load test requirements and inspections in terms of legislation must be complied with and copies of load test certificates and inspections must be kept in the Safety File.

4.4 Electrical installations and machinery on construction sites

The contractor shall ensure that-

- a) Before construction commences and during progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;
- b) All parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- c) In working areas where the exact location of underground electric power lines is unknown, employees using jackhammers, shovels or other hand tools which may make contact with a power line, are provided with insulated productive gloves or otherwise that the handle of the tool being used is insulated;
- d) All temporary electrical installations are inspected at least once a week and electrical machinery on a daily basis before use on a construction site by competent persons and the records of these inspections are recorded in a register to be kept on site; and
- e) The control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing.

4.4.1 Electrical Installation Regulation

The contractor shall ensure adherence to the electrical installation regulation as required by the Occupational Health and Safety Act:

- 1) Definitions.
- 2) Responsibility of electrical installations.
- 3) Certificate of compliance.

- 4) Construction.
- 5) Electrical contractor.
- 6) Commencement of and permission to connect installation work.
- 7) Issuing of certificate of compliance.
- 8) Appeals.
- 9) Application for registration as an accredited person.
- 10) Substitution of lost, damaged or destroyed certificates of registration.
- 11) Fees payment.
- 12) Offences and penalties.
- 13) Repeal of regulations and saving.
- 14) Short title.
- 15) Annexure 2.

Notice of commencement of installation work

16) Annexure 3.

Application for registration as an accredited person.

4.4.2 Electrical Machinery Regulation

The contractor shall ensure adherence to the electrical machinery regulation as required by the Occupational Health and Safety Act and Regulations:

- a) Definitions.
- b) Safety equipment.
- c) Work on disconnected electrical machinery.
- d) Notices.
- e) Switch and transformer premises.
- f) Electrical control gear.
- g) Switchboards.
- h) Electrical machinery in hazardous locations.
- i) Portable electric tools.
- j) Portable electric lights.
- k) Electric fences.
- 1) Inspection authorities.
- m) Earthling.
- n) Supports.
- o) Clearances of power lines.
- p) Protection of supports.
- q) Insulators and fittings.
- r) Conductors.
- s) Overhead services connections and overhead service conductors.
- t) Crossings.

- u) Bare conductors on premises.
- v) Schemes to be submitted to the Postmaster General.
- w) Offences and penalties.
- x) Withdrawal of regulations.
- y) Short title.

4.4.3 Electrical & Mechanical Lock-Out

An electrical and mechanical lockout procedure must be developed by the Principal Contractor and submitted to THE CLIENT for approval before construction commences. This lockout procedure to be adhered to by all Contractors on site.

- 4.4.4 Welding, Flame Cutting, Soldering and Similar Operations
- 1) No employer or user of machinery shall require or permit welding or flame cutting operations to be undertaken unless
 - a) The person operating the equipment has been fully instructed in the safe operation and use of such equipment and in the hazards which may arise from its use;
 - b) Effective protection is provided and used for the eyes and respiratory system and, where necessary, for the face, hands, feet, legs, body and clothing of persons performing such operations, as well as against heat, incandescent or flying particles or dangerous radiation;
 - c) The workplace is effectively partitioned off where practicable and where not practicable all other persons exposed to the hazards contemplated in paragraph (b) are warned and provided with suitable protective equipment.
- 2) No employer or user of machinery shall require or permit welding or flame cutting operations to be undertaken in a confined space, unless
 - a) Effective ventilation is provided and maintained; or
 - b) Masks or hoods maintaining a supply of safe air for breathing are provided and used by the persons performing such operations.
- 3) No employer or user of machinery shall require or permit electric welding to be undertaken in wet or damp places, inside metal vessels or in contact with large masses of metal, unless
 - a) The insulation of the electrical leads is in a sound condition;
 - b) The electrode holder is completely insulated to prevent accidental contact with current-carrying parts;
 - c) The welder is completely insulated by means of boots, gloves or rubber mats; and
 - d) at least one other person who has been properly instructed to assist the welder in case of an emergency is and remains in attendance during operations:
 - e) Provided that the provisions of the regulation shall not apply to a welding process where the maximum voltage to earth does not exceed 50 volts.

- 4) No employer or user of machinery shall require or permit welding, flame cutting, grinding, soldering or similar work to be undertaken in respect of any tube, tank, drum, vessel or similar objector container where such object or container
 - a) Is completely closed, unless a rise in internal pressure cannot render it dangerous; or
 - b) Contains any substance which, under the action of heat, may
 - i. Ignite or explode; or
 - ii. React to form dangerous or poisonous substances, unless a person who is competent to pronounce on the safety thereof has, after examination, certified in writing that any such danger has been removed by opening, ventilating or purging with water or steam, or by any other effective means.
- 5) Where hot work involving welding, cutting, brazing or soldering operations is carried out at places, other than workplaces which have been specifically designated and equipped for such work, the employer shall take steps to ensure that proper and adequate fire precautions are taken.

4.5 Ladders

- 1) An employer shall ensure that every ladder is constructed of sound material and is suitable for the purpose for which it is used, and
 - a) Is fitted with non-skid devices at the bottom ends and hooks or similar devices at the upper ends of the stiles which shall ensure the stability of the ladder during normal use; or
 - b) Is so lashed, held or secured whilst being used as to ensure the stability of the ladder under all conditions and at all times.
- 2) No employer shall use a ladder, or permit it to be used, if it
 - a) i) Has rungs fastened to the stiles only by means of nails, screws, spikes or in like manner; or
 - ii) has rungs which have not been properly let into the stiles: Provided that in the case of welding ladders or ladders of which the rungs are bolted or riveted to the stiles, the rungs need not be let into the stiles; or
 - b) Has damaged stiles, or damaged or missing rungs.
- 3) No employer may permit that
 - a) A ladder which is required to be leaned against an object for support be used which is longer than 9 m; and
 - b) Except with the approval of an inspector, the reach of a ladder be extended by fastening together two or more ladders: Provided that the provisions of this sub regulation shall not apply to extension or free-standing ladders.
- 4) In the case of wooden ladders the employer shall ensure that
 - a) the ladders are constructed of straight graining wood, free from defects, and with the grain running in the length of the stiles and rungs; and
 - b) The ladders are not painted or covered in any manner, unless it has been established that there are no cracks or other inherent weaknesses: Provided

that ladders may be treated with oil or covered with clear varnish or wood preservative.

- 5) When work is done from a ladder, the employer shall
 - a) Take special precautionary measures to prevent articles from falling off; and
 - b) Provide suitable sheaths or receptacles in which hand tools shall be kept when not being used.
- 6) An employer shall ensure that a fixed ladder which exceeds 5 m in length and is attached to a vertical structure with an inclination to the horizontal level of 75⁰ or more
 - a) Has its rungs at least 150 mm away from the structure to which the ladder is attached; and
 - b) Is provided with a cage which
 - i. Extends from a point not exceeding 2,5 m from the lower level to a height of at least 900 mm above the top level served by the ladder; and
 - ii. Shall afford firm support along its whole length for the back of the person climbing the ladder, and for which purpose no part of the cage shall be more than 700 mm away from the level of the rungs:
 - c) Provided that the foregoing provisions of paragraph (b) shall not apply if platforms, which are spaced not more than 8 m apart and suitable for persons to rest on, are provided.
- 4.6 Use and temporary storage of flammable liquids on construction sites
 The contractor shall ensure that
 - a) Where flammable liquids are being used, applied or stored at the workplace concerned, this is done in such a manner which would cause no fire or explosion hazard, and that the workplace is effectively ventilated: Provided that where the workplace cannot effectively be ventilated
 - i. Every employee involved is provided with a respirator, mask or breathing apparatus of a type approved by the chief inspector, and
 - ii. Steps are taken to ensure that every employee, while using or applying flammable liquid, uses the apparatus supplied to him or her;
 - b) No person smokes in any place in which flammable liquid is used or stored, and such contractor shall affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;
 - c) Flammable liquids on a construction site is stored in a well-ventilated reasonably fire resistant container, cage or room and kept locked with proper access control measure in place;
 - d) An adequate amount of fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognised symbolic signs;
 - e) Only the quantity of flammable liquid needed for work on one day is to be taken out of the store for use;

- f) All containers holding flammable liquids are kept tightly closed when not in actual use and, after their contents have been used up, to be removed from the construction site and safely disposed of;
- g) Where flammable liquids are decanted, the metal containers are bonded or earthed; and
- h) No flammable materials such as cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids.

4.7 Good Housekeeping on construction sites

The contractor shall ensure that-

- a) Suitable good housekeeping is continuously implemented on each construction site, including provisions for the
 - i. Proper storage of materials and equipment; and
 - ii. Removal of scrap, waste and debris at appropriate intervals;
- b) Loose materials required for use, are not placed or allowed to accumulate on the site so as to obstruct means of access to and egress from workplaces and passageways;
- c) Waste and debris are not disposed of from a high place with a chute.

4.8 Stacking and storage on construction sites

Notwithstanding the provisions for the stacking of articles contained in the General Safety Regulations, a contractor shall ensure that-

- a) A competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- b) Adequate storage areas are provided;
- c) There are demarcated storage areas; and
- d) Storage areas are kept neat and under control.

4.9 Fire precautions on construction sites

Every contractor shall ensure that-

- a) All appropriate measures are taken to avoid the risk of fire;
- b) Sufficient and suitable storage is provided for flammable liquids, solids and gasses;
- c) Smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- d) In confined spaces and other spaces in which flammable gasses, vaporous or dust can cause danger
 - i. Only suitably protected electrical installations and equipment, including portable lights are used;
 - ii. There are no flames or similar means of ignition;
 - iii. There are conspicuous notices prohibiting smoking
 - iv. Oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and
 - v. Adequate ventilation is provided;
- e) Combustible materials do not accumulate on the construction site;

- f) Welding, flame cutting and other hot work are done only after the appropriate precautions as required have been taken to reduce the risk of fire;
- g) Suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order;
- h) The fire equipment contemplated in paragraph (g) is inspected by a competent person, who has been appointed in writing, in the manner indicated by the manufacturer thereof;
- i) A sufficient number of workers are trained in the use of fire-extinguishing equipment;
- j) Where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- k) The means of escape is kept clear at all times;
- 1) There is an effective evacuation plan providing for all
 - i. Persons to be evacuated speedily without panic;
 - ii. Persons to be accounted for, and
 - iii. Plant and processes to be shut down; and
- m) A siren is installed and sounded in the event of a fire.

4.10 Transport of Workers

The Principal Contractor and any other contractor shall not;

- Allow persons to be transported together with tools and equipment unless there is an appropriate area or section to store the tools and equipment;
- Allow persons to be transported in a non-enclosed vehicle without a proper canopy covering the back and top and without proper sitting area. Workers shall not be permitted to stand or sit on the edge of the transporting vehicle;
- Allow workers to be transported in LDV's without canopies and the correct number of seats for the passengers.

4.11 Penalties and Offences

The Client's Health and Safety Agent will conduct site audits and ad-hoc visits. Penalties may be imposed for on-going non-compliance of the provisions stated in the Client's health and safety specification or the Principal Contractor's safety plan.

Non-compliance items identified during audits/visits will be categorized into three levels:

1) A Hazard

To be rectified immediately (Life threatening) and a notice to this effect will be issued. All activities must seize immediately and corrective action must be taken.

2) B Hazard

To be rectified within 24 hours (Serious injury or property damage possible) and a notice to this effect will be issued.

3) C Hazard

To be rectified within 48 hours (Minor or no injury) and a notice will be issued to this effect.

4.12 Construction welfare facilities

- 1) The contractor shall, depending on the number of workers and the duration of the work, provide at or within reasonable access of every construction site, the following clean and maintained facilities:
 - a) At least one shower facility for every 15 workers;
 - b) At least one sanitary facility for every 30 workers;
 - c) Changing facilities for each sex; and
 - d) Sheltered eating areas.
- 2) (A contractor shall provide reasonable and suitable living accommodation for the workers at construction sites which are remote from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

NOTE: The Client or his Agent has the right; to stop the Contractor from executing construction works which either:

- is not in accordance with the Health and Safety plan for the site and/or
- poses a threat to the health and safety of persons

Should the Client invoke this right, the Client will, in addition to any other legal remedies, invoke its rights to claim penalties and/or cancel the contract between itself and the Contractor in terms of the relevant provisions thereof.

TECHNICAL SPECIFICATION

as per Bill of quantities, Project Specifications and Drawings

MATERIALS AND EQUIPMENT SPECIFICATION

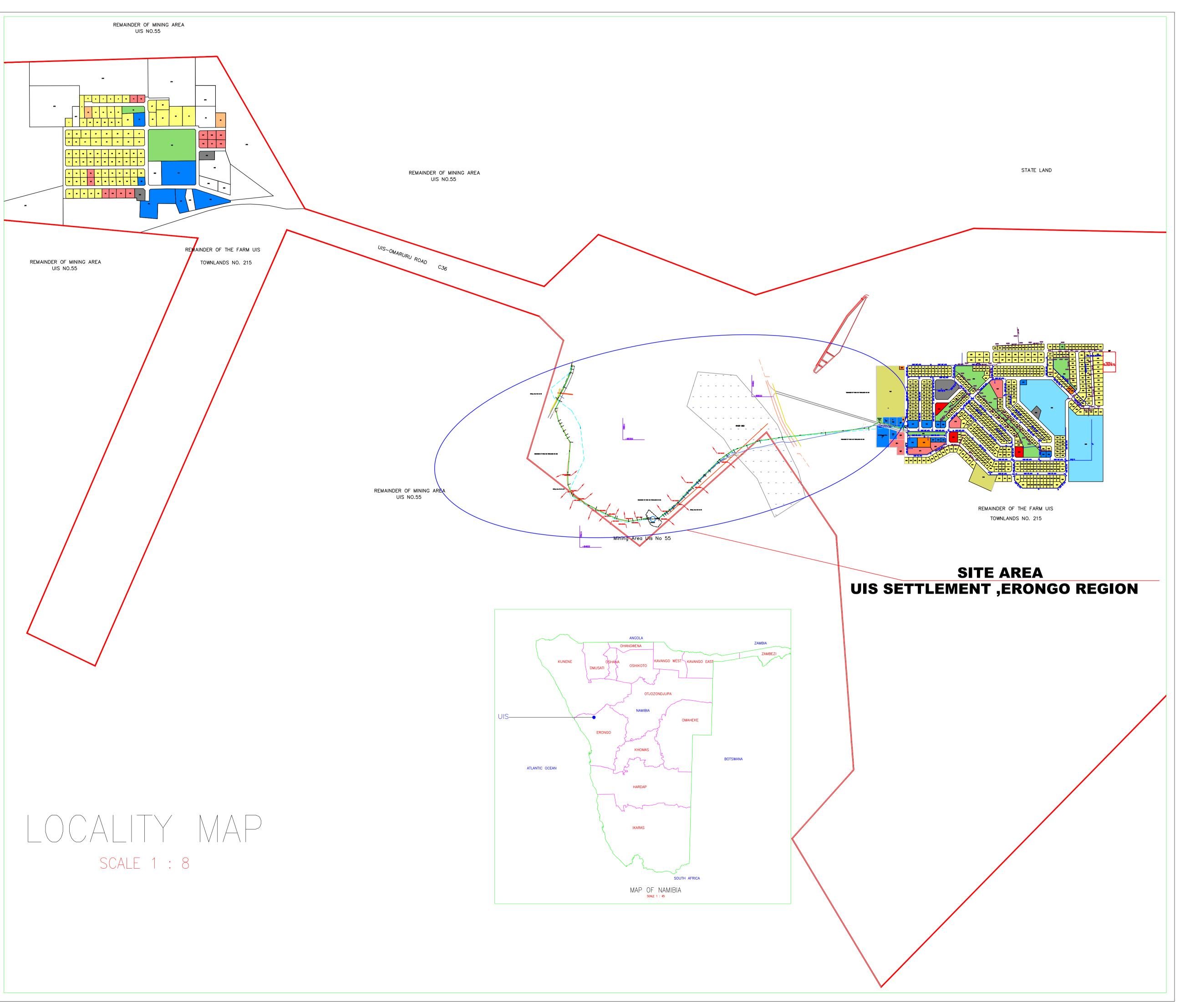
NOTES:

- ❖ Bidders must Bid for materials and equipment to be supplied and installed exactly according to specification.
- ❖ In the Schedules, Specifications and Drawings, reference is made to materials and equipment which shall be preferred. This is for technical and standardisation reason. Similar alternatives may be offered in a covering letter. For the purpose of standardisation, the Engineer's decision as to which equipment shall be supplied shall be final.

DRAWINGS

LIST OF DRAWINGS

DWG. NO.	DESCRIPTION			
ALV25/ERC/P01-LM	Locality Map			
ALV25/ERC/P01-WA-01	Uptown Reticulation Layout Plan			
ALV25/ERC/P01-WA-02	Downtown Reticulation Layout Plan			
ALV25/ERC/P01-WA-03	Uptown Long section-0-600m			
ALV25/ERC/P01-WA-04	Uptown Long section-600m-END			
ALV25/ERC/P01-WA-05	Downtown Long Sections-0-600m			
ALV25/ERC/P01-WA-06	Downtown Long Sections-600m-END			
ALV25/ERC/P01-WA-07	Water Reticulation Typical Details: Horizontal Thrust Blocks, Valves, Hydrants, etc.			
ALV25/ERC/P01-WA-08	Water Reticulation Typical Details: Excavation Details			
ALV25/ERC/P01-WA-09	Water Reticulation Typical Details: Vertical Thrust Blocks, Air and Scour Valves,			



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DATE:	DESCRIPTION:	INITIALS

CLIENT:



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ALV CONSULTING ENGINEERS

Departmental Project Number:

JANUARY 2025

OSHAKATI NAMIBIA

DATE:...../...../......

ENGINEERING CONSULTANT:



PROJECT TITLE:

CONSTRUCTION OF A BULK WATER PIPELINE IN UIS, ERONGO REGION.

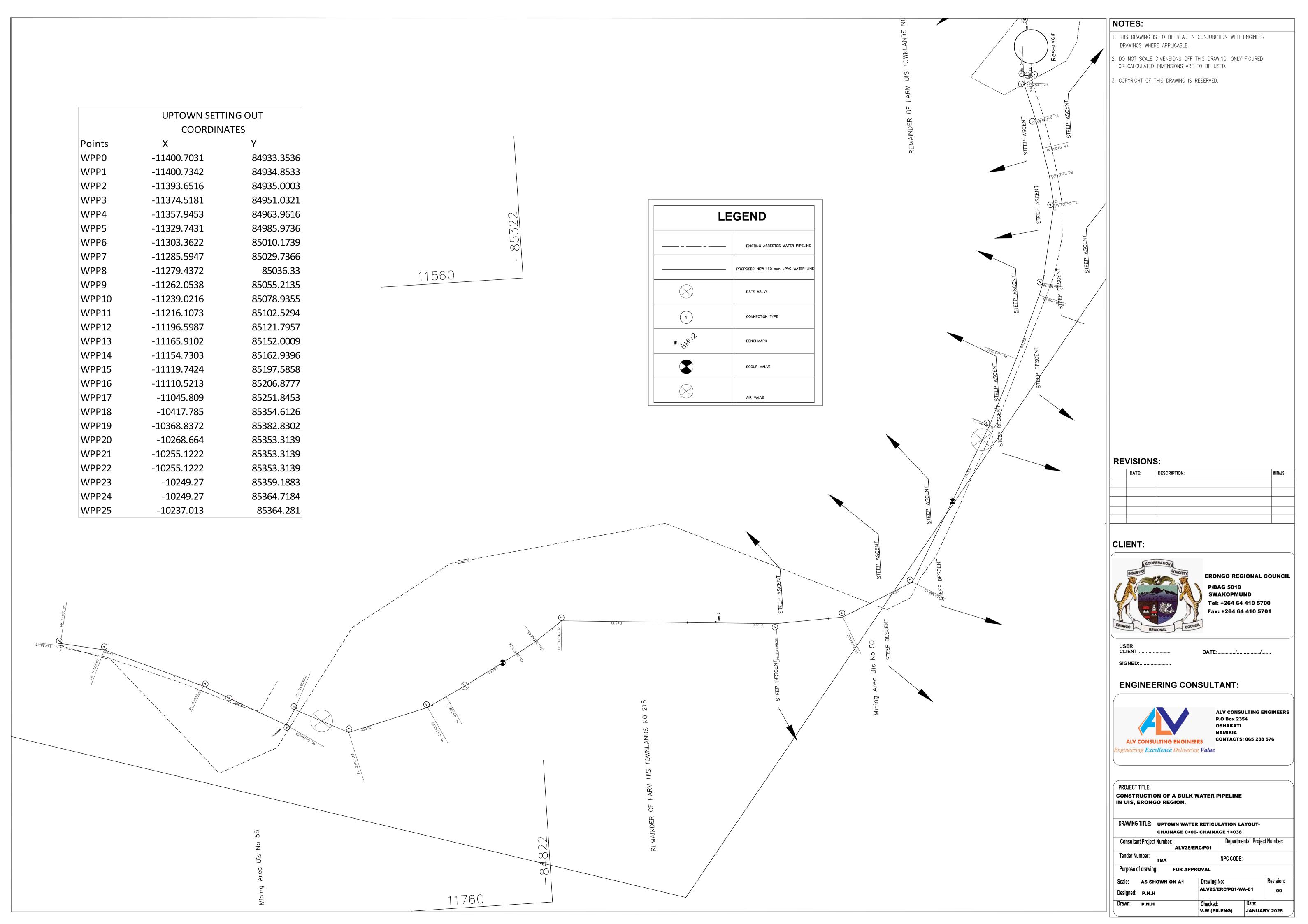
Consultant Project Number: ALV25/ERC/P01

DRAWING TITLE: LOCALITY MAP

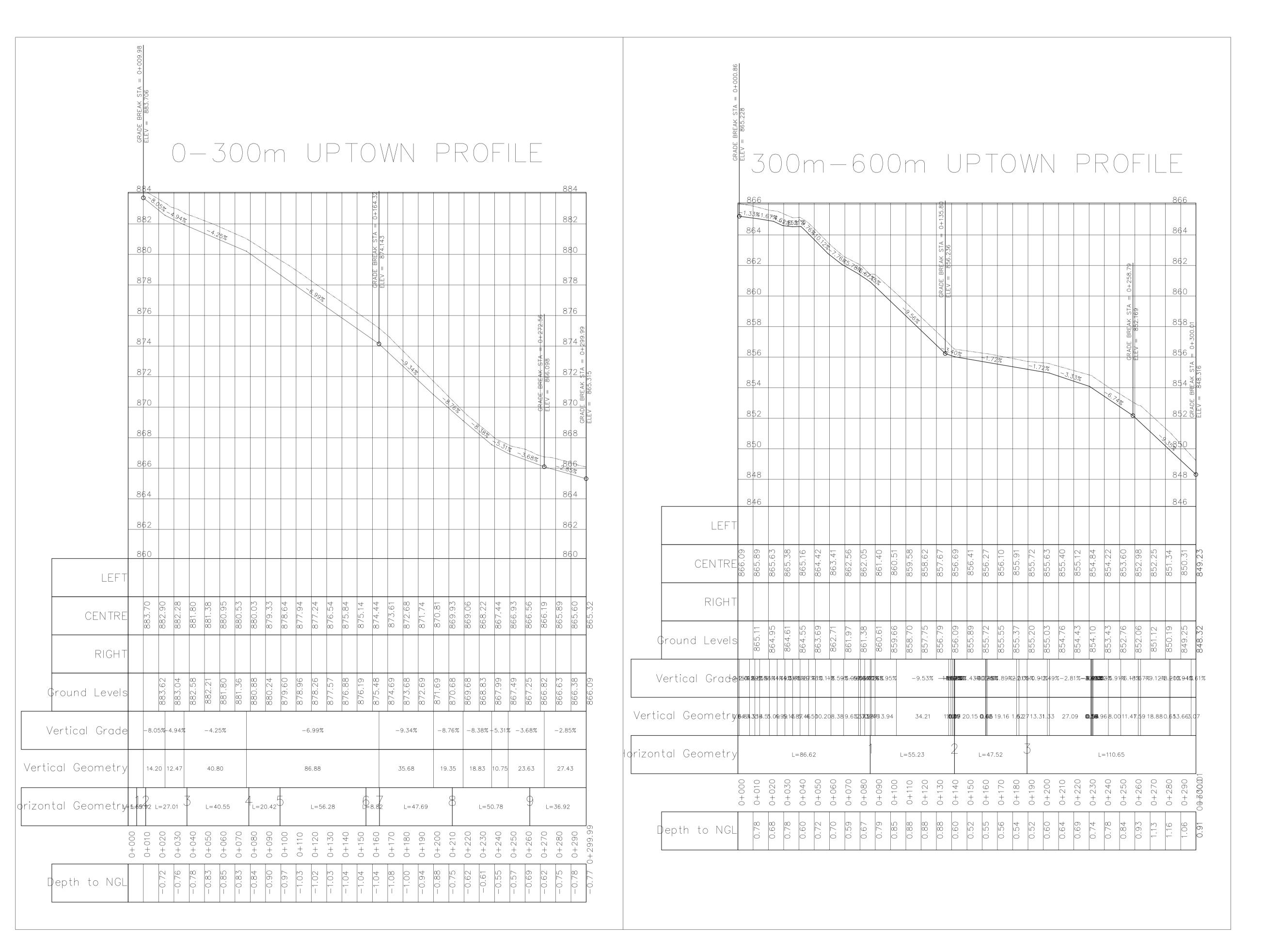
NPC CODE:

ALV25/ERC/P01-LM Designed: P.N.H Drawn: P.N.H

V.W (PR.ENG)







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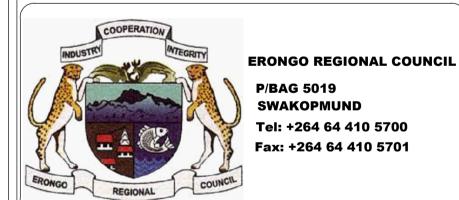
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CLIENT:



ENGINEERING CONSULTANT:



ALV CONSULTING ENGINEERS
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OSHAKATI
NAMIBIA
CONTACTS: 065 238 576

PROJECT TITLE:

CONSTRUCTION OF A BULK WATER PIPELINE IN UIS, ERONGO REGION.

DRAWING TITLE: UPTOWN WATER LINE LONGITUDINAL PROFILE-

Consultant Project Number:

ALV25/ERC/P01

Departmental Project Number:

Tender Number:
TBA

Purpose of drawing:
FOR APPROVAL

Scale: AS SHOWN ON A1

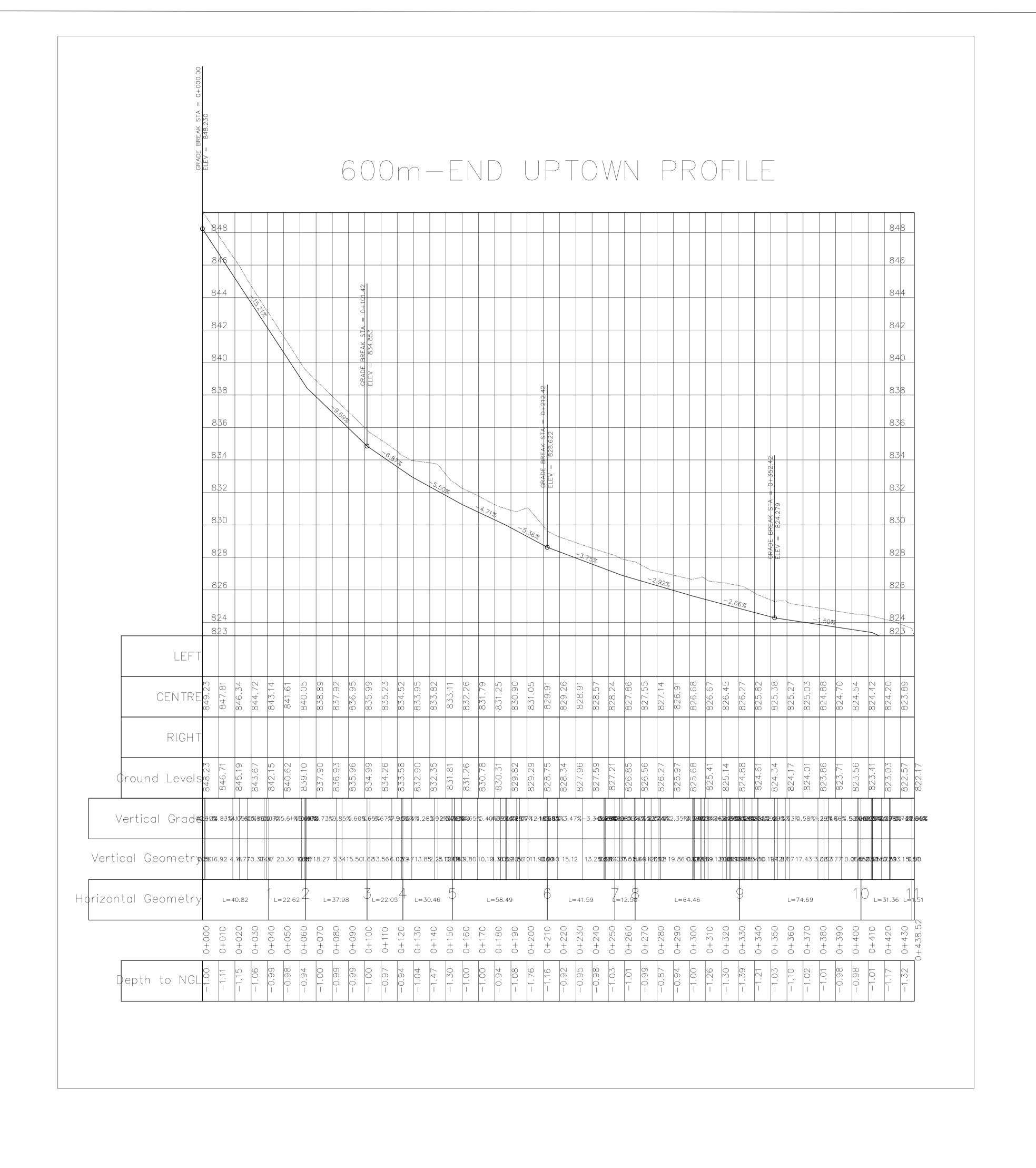
Designed: P.N.H

Drawing No:
ALV25/ERC/P01-WA-03

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Checked: V.W (PR.ENG)

Date:
JANUARY 2025



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SIGNED:....

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ALV CONSULTING ENGINEERS

PROJECT TITLE: CONSTRUCTION OF A BULK WATER PIPELINE IN UIS, ERONGO REGION.

DRAWING TITLE: UPTOWN WATER LINE LONGITUDINAL PROFILE-

600m to END. Consultant Project Number:

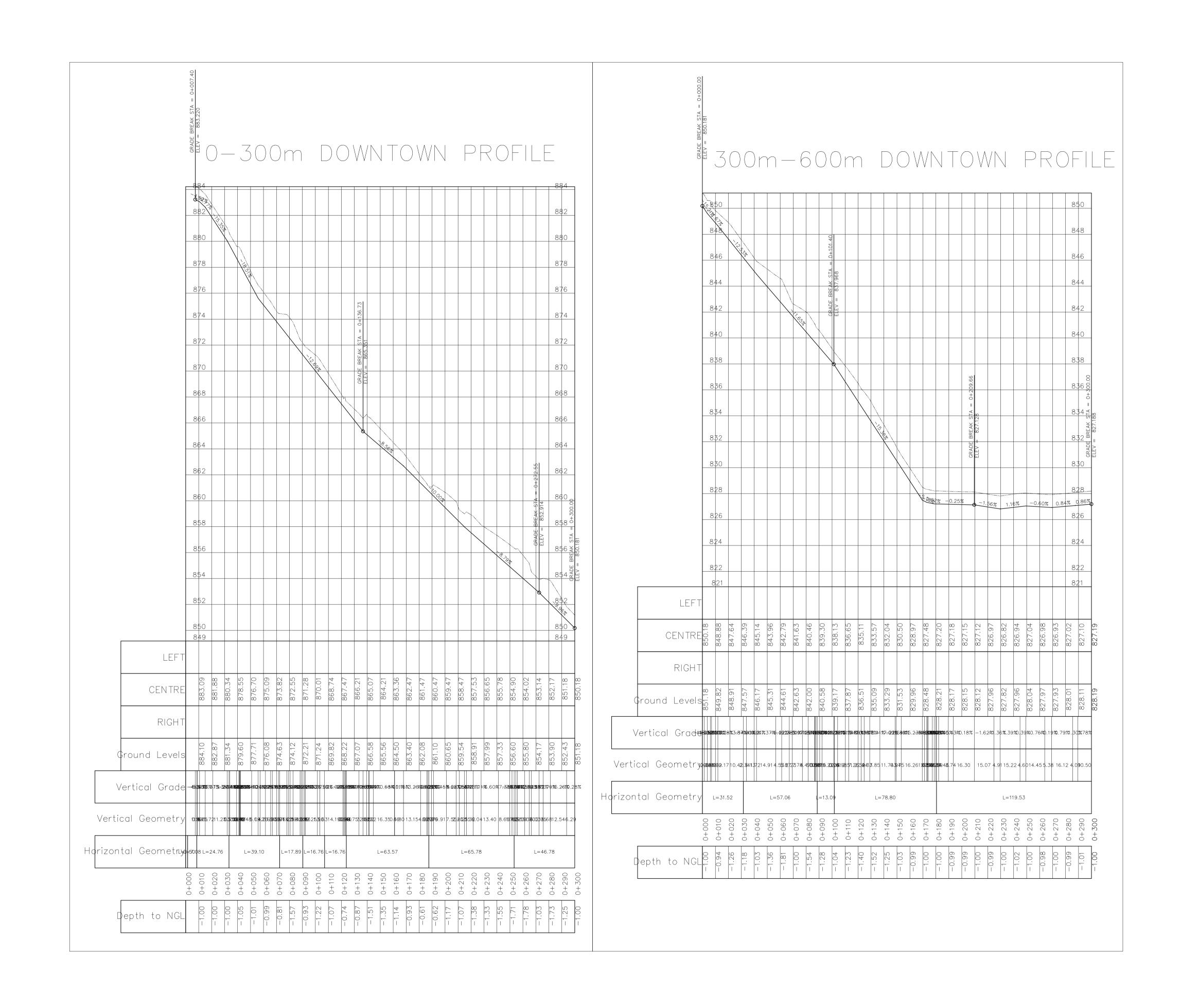
Departmental Project Number: ALV25/ERC/P01 NPC CODE:

Tender Number: Purpose of drawing: FOR APPROVAL

Drawn: P.N.H

Scale: AS SHOWN ON A1 ALV25/ERC/P01-WA-04 Designed: P.N.H

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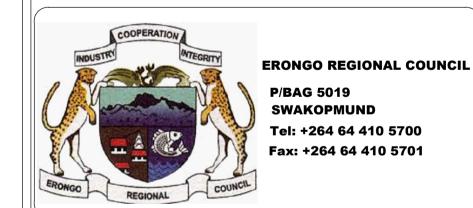
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ENGINEERING CONSULTANT:



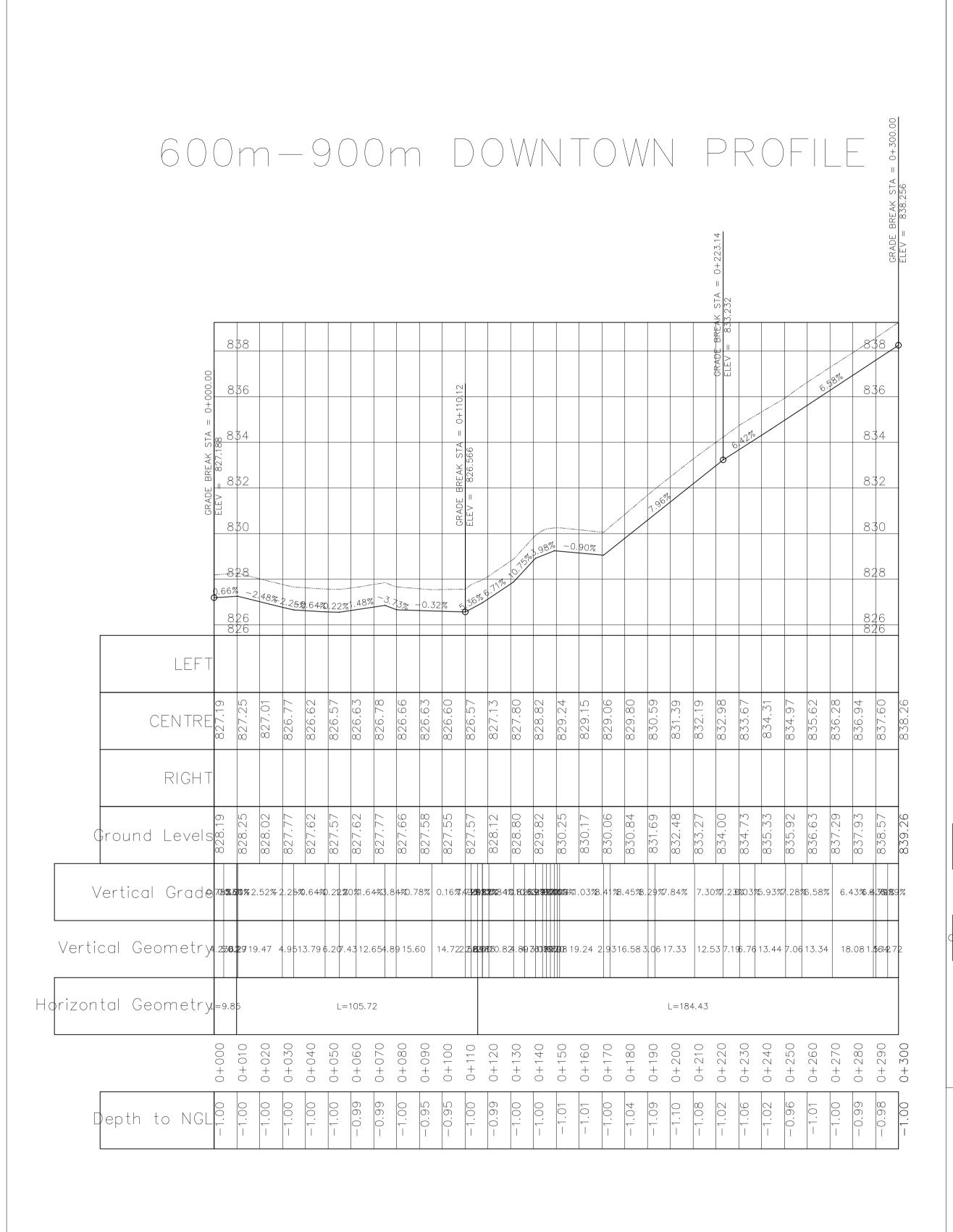
PROJECT TITLE: CONSTRUCTION OF A BULK WATER PIPELINE IN UIS, ERONGO REGION.

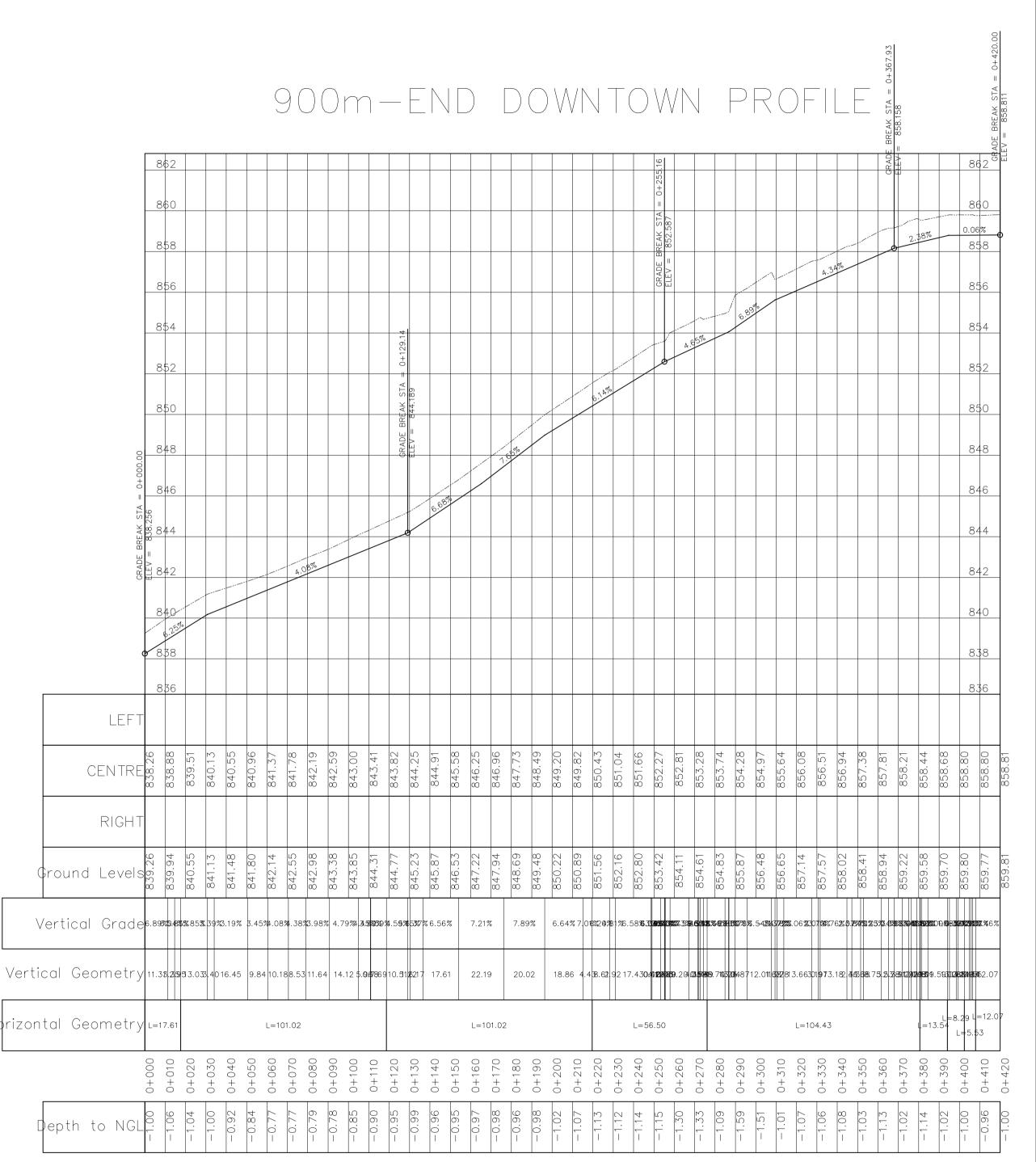
DRAWING TITLE: DOWNTOWN WATER LINE LONGITUDINAL PROFILE-

Consultant Project Number: Departmental Project Number: ALV25/ERC/P01 Tender Number:

Purpose of drawing: FOR APPROVAL Scale: AS SHOWN ON A1 ALV25/ERC/P01-WA-05 Designed: P.N.H

Drawn: P.N.H V.W (PR.ENG) **JANUARY 2025**





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USER CLIENT:.....

DATE:...../...../.....

ENGINEERING CONSULTANT:



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NAMIBIA
CONTACTS: 065 238 576

PROJECT TITLE:

CONSTRUCTION OF A BULK WATER PIPELINE
IN UIS, ERONGO REGION.

DRAWING TITLE: DOWNTOWN WATER LINE LONGITUDINAL PROFILE-

Consultant Project Number:

ALV25/ERC/P01

Tender Number:

Departmental Project Number:

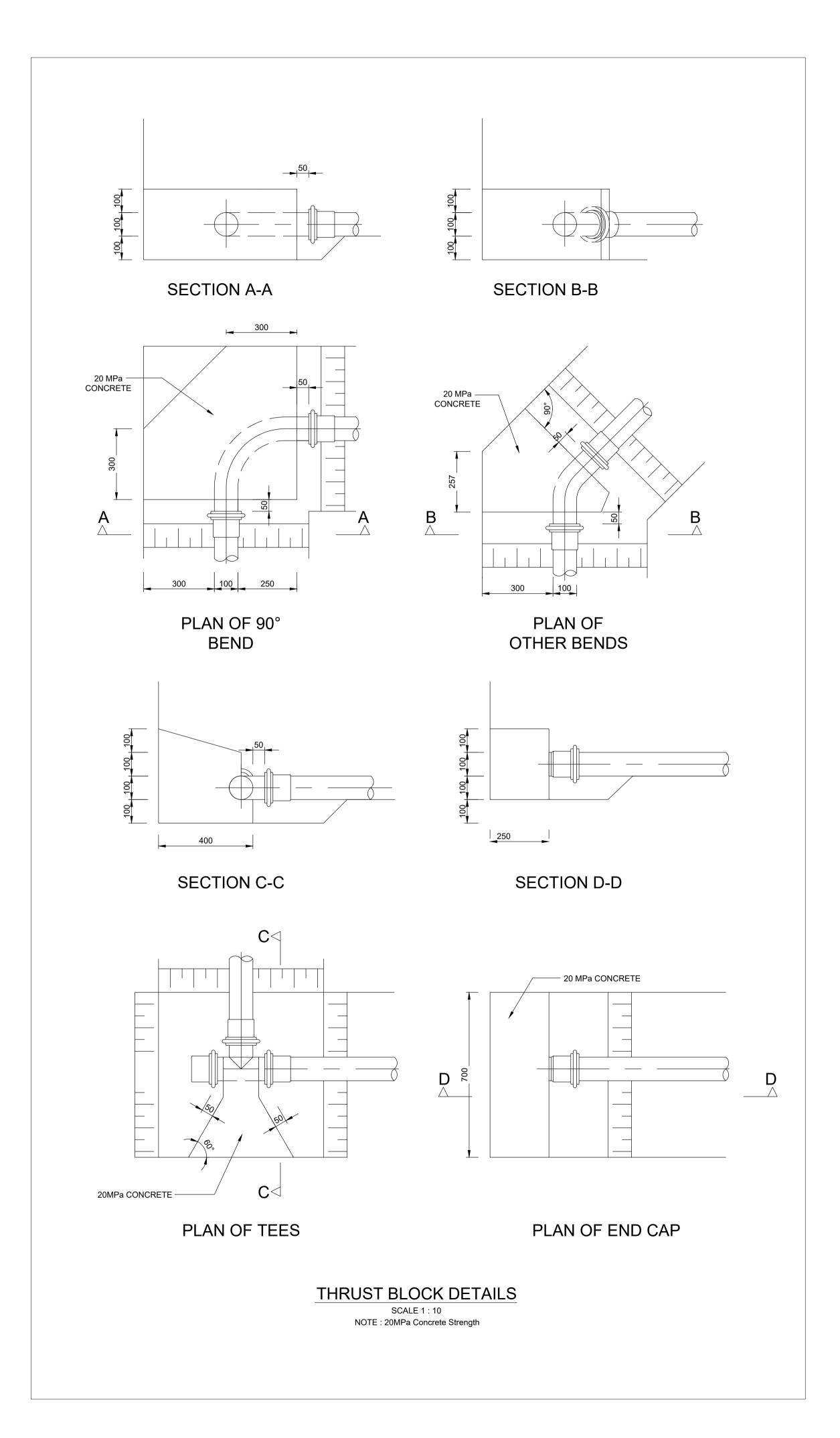
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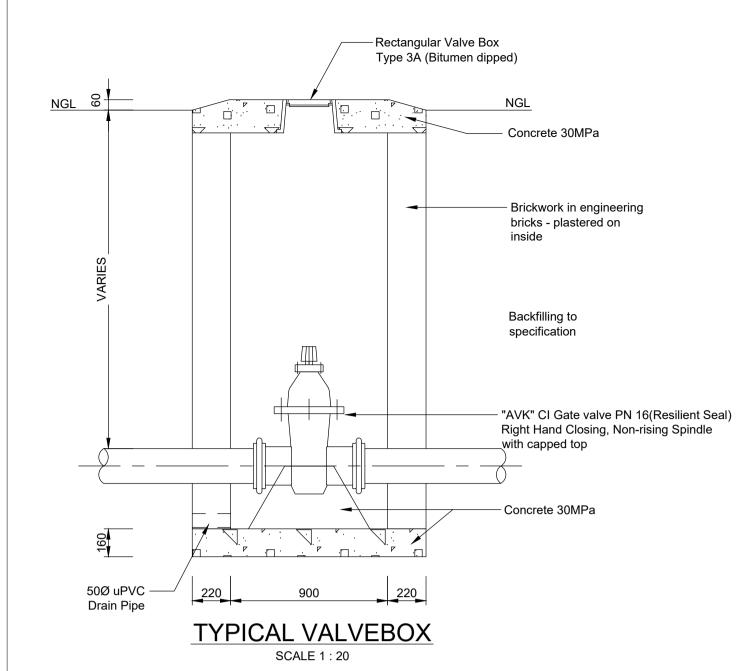
Purpose of drawing: FOR APPROVAL

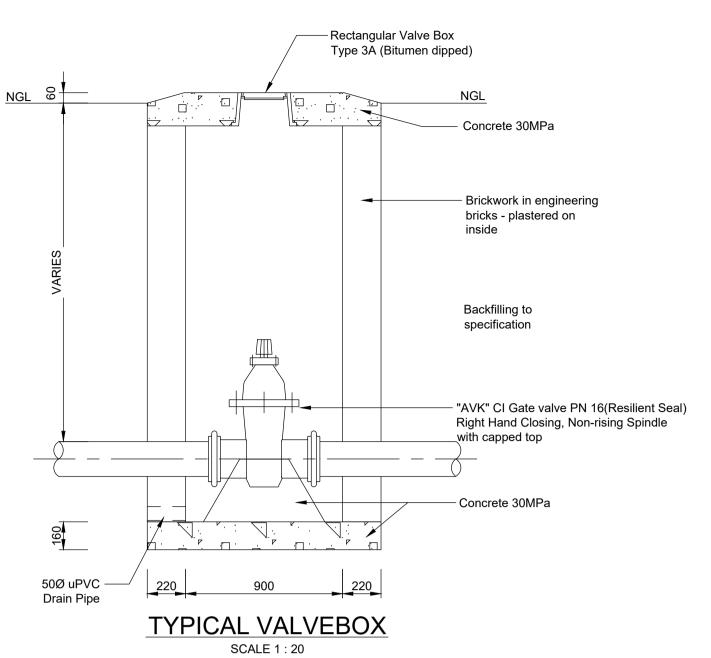
| Scale: AS SHOWN ON A1 | Drawing No: | Red | ALV25/ERC/P01-WA-06 | | Drawn: P.N.H | Checked: | Date: |

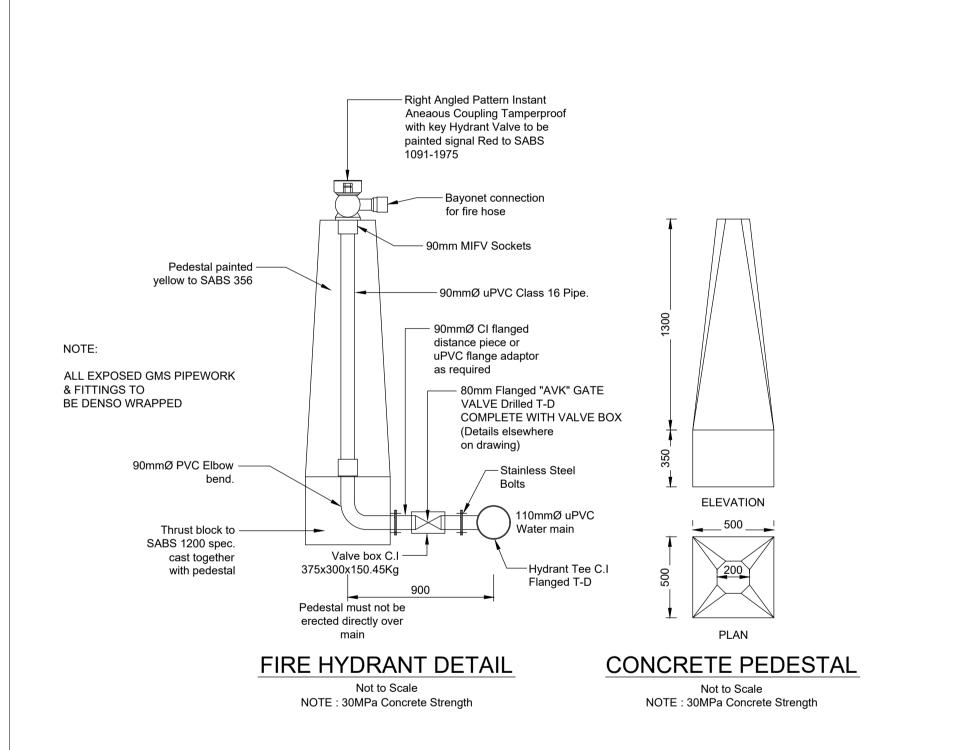
V.W (PR.ENG)

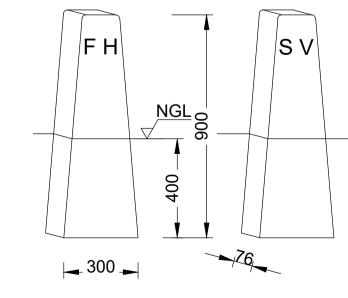
JANUARY 2025











VALVE MARKER HYDRANT MARKER

VALVE & HYDRANT MARKERS

Precast Concrete (30MPa)

LETTERWORK:-

min. Height = 75mm min. Engraved depth = 5mm PAINTWORK:-

> F.H. Letters = RED S.V. Letters = BLACK Markers = YELLOW

Planted in ground, on Street Boundary opposite Fire Hydrants and Valve Boxes.

NOTES:

ERF BOUNDARY

BEND, TEE AND ENDCAP.

1.ALL uPVC WATER LINES TO BE CLASS 9.

2.ALL HDPE WATERLINES TO BE CLASS 16

3.ALL WATER LINES TO BE 1000mm BELOW NGL, EXCEPT LINES AND CROSSING THE ROAD WHICH

4.WATER LINES TO BE POSITIONED 1.5m FROM THE

6.ALL WORK TO BE INSPECTED & APPROVED BY THE

ENGINEER PRIOR TO CLOSING UP OF THE LINES.

7.ALL LEVELS TO BE CONFIRMED ON SITE

5.THRUST BLOCKS AT EVERY REDUCER, VALVE,

ARE TO BE MINIMUM 1200mm BELOW NGL

PRECAST CONCRETE MARKERS

SCALE 1:20 NOTE: 30MPa Concrete Strength

NOTES:

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CONTACTS: 065 238 576

P.O Box 2354

OSHAKATI NAMIBIA

P/BAG 5019

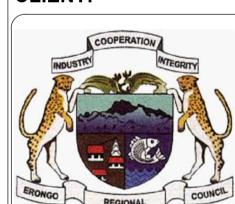
SWAKOPMUND

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Fax: +264 64 410 5701

CLIENT:

SIGNED:....



CLIENT:. DATE:...../..../.....

ENGINEERING CONSULTANT:



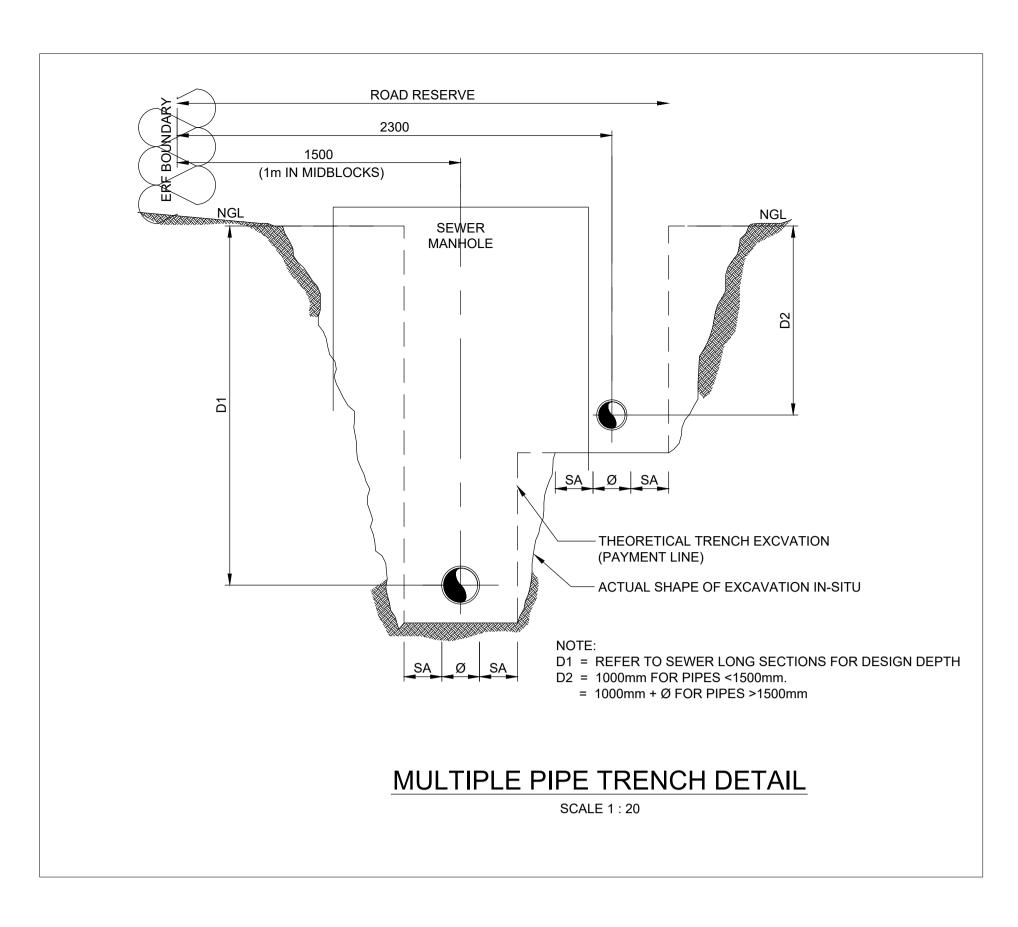
PROJECT TITLE: CONSTRUCTION OF A BULK WATER PIPELINE IN UIS, ERONGO REGION.

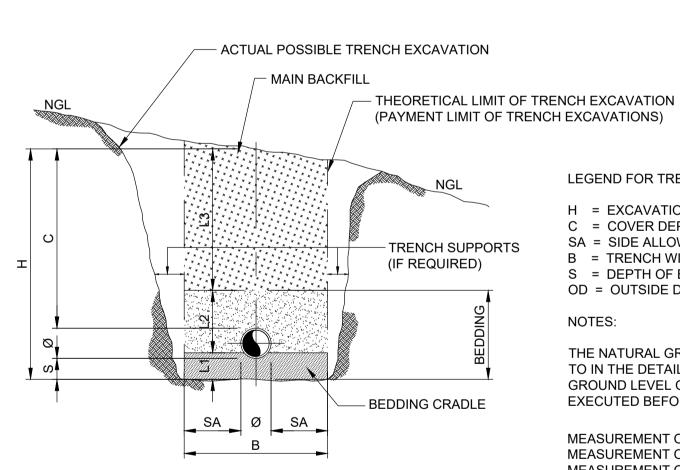
DRAWING TITLE: WATER RETICULATION TYPICAL DETAILS: HORIZONTAL THRUST BLOCKS AND VALVE CHAMBERS, MARKERS

Departmental Project Number: Consultant Project Number: ALV25/ERC/P01 Tender Number: NPC CODE:

Purpose of drawing: FOR APPROVAL Drawing No: Scale: AS SHOWN ON A1 ALV25/ERC/P01-WA-07 Designed: P.N.H

Drawn: P.N.H Checked: V.W (PR.ENG) **JANUARY 2025**





LEGEND FOR TRENCH EXCAVATIONS:

- H = EXCAVATION DEPTH
- C = COVER DEPTH SA = SIDE ALLOWANCE
- B = TRENCH WIDTH
- S = DEPTH OF BEDDING CRADLE OD = OUTSIDE DIAMETER OF PIPE

NOTES:

THE NATURAL GROUND LEVEL (NGL) REFERRED TO IN THE DETAILS MAY ALSO BE THE FINAL GROUND LEVEL OF BULK EARTHWORKS EXECUTED BEFORE TRENCH EXCAVATION.

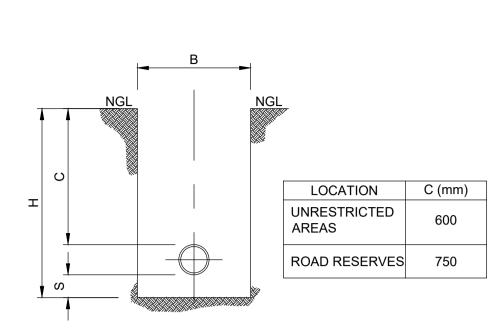
MEASUREMENT OF EXCAVATION: H x B MEASUREMENT OF BEDDING: (L1 + L2) x B MEASUREMENT OF MAIN BACKFILL: L3 x B

TYPICAL STANDARD FOR TRENCH EXCAVATIONS

SCALE 1:20

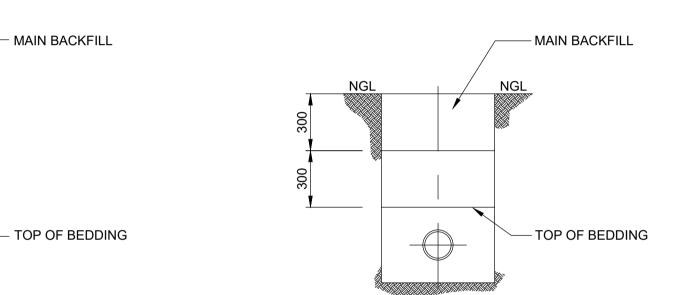
TABLE FOR SIDE ALLOWANCE

NOMINAL PIPE DIAMETER		SIDE ALLOWANCE		
FROM	то	SA	_	
0	300	200	TRENCH WIDTH ASES = 600mm	
301	600	300	ENCH S = 6	
601	900	400	IM TREN	
901	1800	450	MINIMUM	
MORE THAN 1800		0,25 x Ø	12	



VALUES IN TABLE ARE APPLICABLE UNLESS OTHERWISE SPECIFIED IN THE PROJECT SPECIFICATION

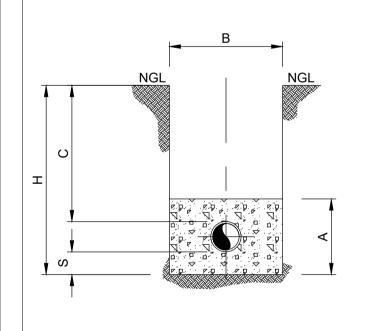
MINIMUM COVER TO PIPES



(IN UNRESTRICTED AREA)

(IN ROAD RESERVES)

STANDARD PLACING OF MAIN BACKFILL



NOTE: CONCRETE ENCASEMENT MUST BE CAST MONOLITHICALLY. ONLY VERTICAL JOINTS AT PIPE JOINTS ARE ALLOWED.

(mm Ø) (mm) (mm) 100 250 75 150 325 75 200 400 75 75 225 440 250 500 90 300 550 100 100 350 625 650 100 375 675 150 450 725 150 450-600 601-900 901-1800

TABLE FOR CONCRETE ENCASEMENT

STANDARD DETAIL FOR PROTECTIVE BEDDING

NOTES:

ONLY LIGHT MACHINE COMPACTION

— TOP OF BEDDING

150mm LAYERS

BEDDING CRADLE OF COMPACTED SELECTED

MATERIAL FOR BEDDING CLASS SPECIFIED

STANDARD PLACING OF

BEDDING MATERIAL

SELECTED FILL TO BE EVENLY

PLACED AND COMPACTED IN

ABOVE PIPE BARREL

- 1.ALL WATER LINES TO BE uPVC CLASS 9.
- 2.ALL ERF CONNECTIONS TO BE 32/25Ø HDPE CLASS 10.
- 3.ALL WATER LINES AND ERF CONNECTIONS TO BE 1000mm BELOW NGL, EXCEPT LINES AND CONNECTIONS CROSSING THE ROAD WHICH ARE TO BE MINIMUM 1200mm BELOW NGL.

4.FOR ROAD RESERVES 10m AND LESS:

- a)WATER ONLY: 1.3m FROM ERF BOUNDARY b)SEWER ONLY: 1.5m FROM ERF BOUNDARY c)COMBINED SEWER AND WATER: 1.2m FOR SEWER AND 1.8m FOR WATER LINES.
- 5.FOR ROAD RESERVES WIDER THAN 10m:
- a)WATER ONLY: 1.6m FROM ERF BOUNDARY b)SEWER ONLY: 1.5m FROM ERF BOUNDARY c)COMBINED SEWER AND WATER: 1.5m FOR SEWER AND 2.3m FOR WATER LINES.
- 6.THRUST BLOCKS AT EVERY REDUCER, VALVE, HYDRANT, BEND, TEE AND ENDCAP.
- 7.ALL WORK TO BE INSPECTED & APPROVED BY THE ENGINEER PRIOR TO CLOSING UP OF THE LINES.
- 8.ALL LEVELS TO BE CONFIRMED ON SITE

REVISIONS:

NOTES:

DRAWINGS WHERE APPLICABLE.

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DATE:...../...../.....

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CONTACTS: 065 238 576

P.O Box 2354

OSHAKATI NAMIBIA

ENGINEERING CONSULTANT:



IN UIS, ERONGO REGION.

PROJECT TITLE:

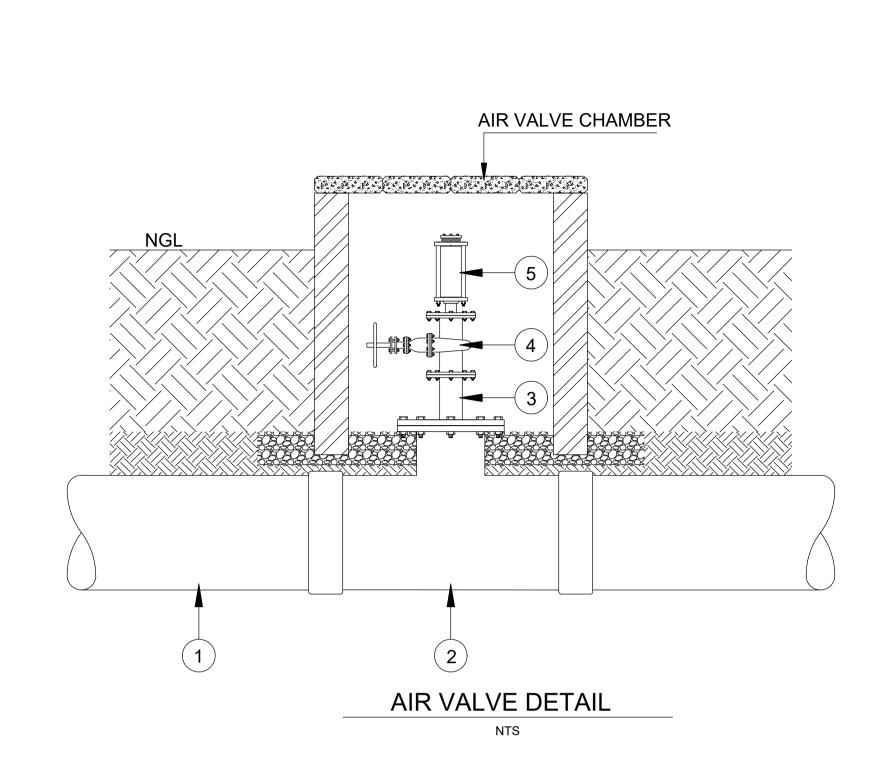
SIGNED:....

CONSTRUCTION OF A BULK WATER PIPELINE

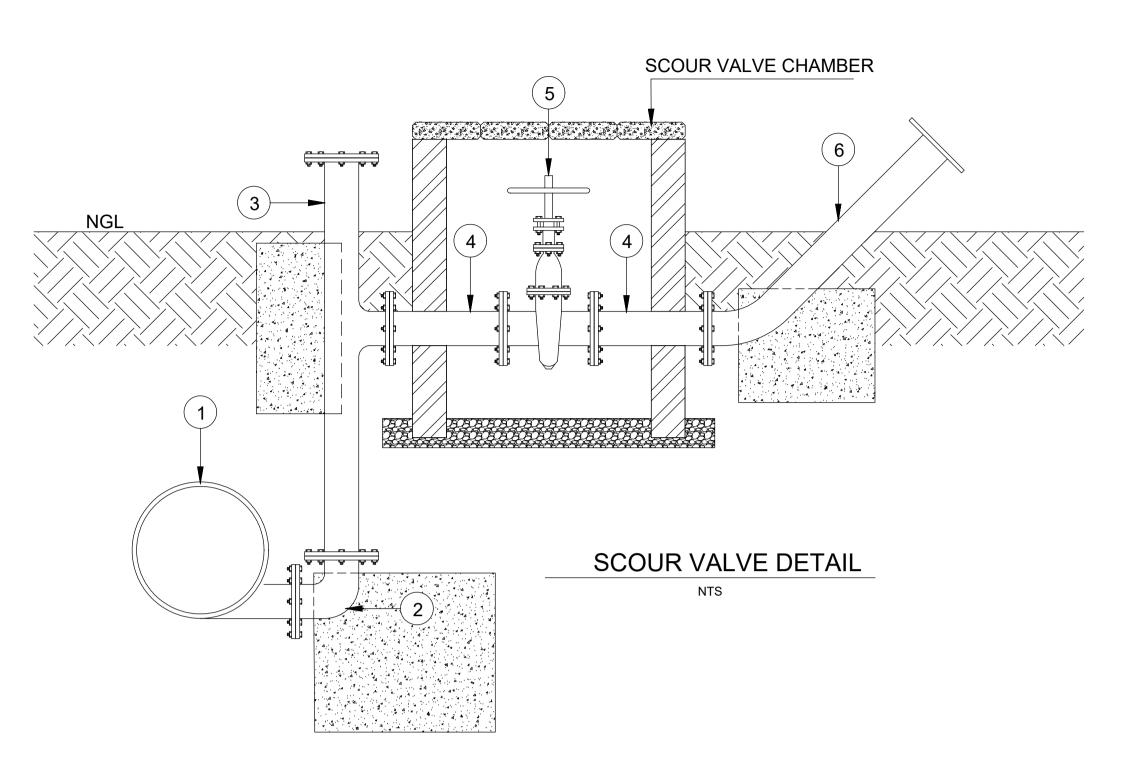
DRAWING TITLE: WATER RETICULATION TYPICAL DETAILS: **EXCAVATION DETAILS** Departmental Project Number: Consultant Project Number: ALV25/ERC/P01

> Tender Number: NPC CODE: Purpose of drawing: FOR APPROVAL

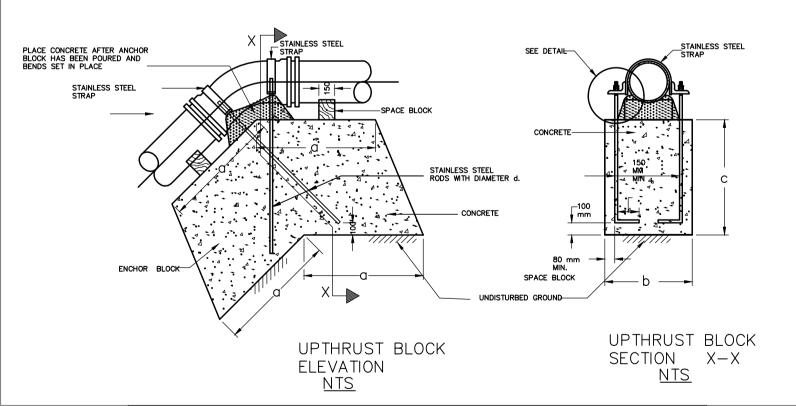
Scale: AS SHOWN ON A1 Drawing No: ALV25/ERC/P01-WA-08 Designed: P.N.H Drawn: P.N.H Checked: V.W (PR.ENG) **JANUARY 2025**

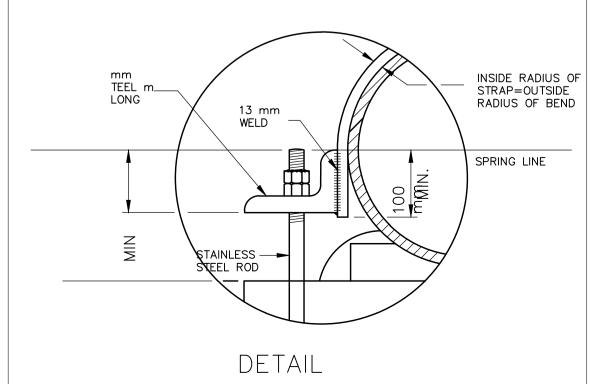


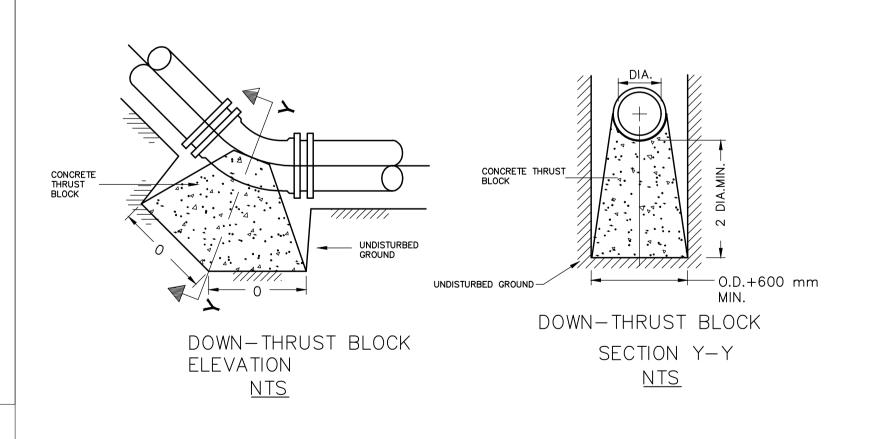
NUMBER	MATERIAL	NOMINAL DIAMETER	DETAIL DESCRIPTION	TOTAL
1	uPVC AS PER PIPE SIZE RISI		RISING MAIN PIPE	1
2	GRP	AS PER PIPE SIZE AIR T-PIECE, ONE END FLANGED		1
3	MILD STEEL:FBE	AS PER PIPE SIZE	STAND PIPE, BOTH ENDS FLANGED	1
4	STANDARD	AS PER PIPE SIZE	RESILIENT SEAL GATE VALVE	1
5	STANDARD	AS PER PIPE SIZE	DOUBLE-ACTION AIR VALVE	1



NUMBER	MATERIAL	NOMINAL DIAMETER	DETAIL DESCRIPTION	TOTAL
1	uPVC	AS PER PIPE SIZE	SCOUR T-PIECE, ONE END FLANGED	1
2	MILD STEEL: FBE	AS PER PIPE SIZE	90° BEND, BOTH ENDS FLANGED	1
3	MILD STEEL:FBE	AS PER PIPE SIZE	PIPE SECTION WITH T-PIECE, ALL ENDS FLANGED	1
4	MILD STEEL:FBE	AS PER PIPE SIZE	PIPE SECTION, BOTH ENDS FLANGED	1
5	STANDARD	AS PER PIPE SIZE	RESILIENT SEAL GATE VALVE	1
6	MILD STEEL:FBE	AS PER PIPE SIZE	45° FLUSH PIPE, BOTH ENDS FLANGED	1







MINIMUM DIMENSIONS							
	mm						
PIPE SIZE	а	b	С	d	е		
100	450	600	750	13	150		
150	600	900	900	13	300		
200	600	900	1500	13	450		
250	900	900	1500	20	600		
300	1200	900	1650	20	800		
350	1200	1200	1650	25	1000		

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ENGINEERING CONSULTANT:



SIGNED:....

ALV CONSULTING ENGINEERS
P.O Box 2354
OSHAKATI
NAMIBIA
CONTACTS: 065 238 576

NPC CODE:

PROJECT TITLE:

CONSTRUCTION OF A BULK WATER PIPELINE
IN UIS, ERONGO REGION.

DRAWING TITLE: WATER RETICULATION TYPICAL DETAILS:

Consultant Project Number:

ALV25/ERC/P01

Departmental Project Number:

Tender Number:

TBA

Purpose of drawing:

FOR APPROVAL

Scale: AS SHOWN ON A1

Designed: P.N.H

Drawing No:
ALV25/ERC/P01-WA-09

Oo

Checked:
V.W (PR.ENG)

Revision:
Oo

ALV25/ERC/P01-WA-09

JANUARY 2025

PART 3 – Conditions of Contract and Contract Forms

Section VI - General Conditions of Contract

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General Conditions of Contract

A. General

1. Definitions

- 1.1 Boldface type is used to identify defined terms.
 - (a) The Accepted Contract Amount means the amount accepted in the Notification of award for the execution and completion of the Works and the remedying of any defects.
 - (b) The Activity Schedule is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity.
 - (c) The Adjudicator is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
 - (d) Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.
 - (e) Compensation Events are those defined in GCC Clause 41 hereunder.
 - (f) The Completion Date is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 53.1.
 - (g) The Contract is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
 - (h) The Contractor is the party whose Bid to carry out the Works has been accepted by the Employer.
 - (i) The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.
 - (j) The Contract Price is the Accepted Contract Amount stated in the Notification of award and thereafter as adjusted in accordance with the Contract.
 - (k) Days are calendar days; months are calendar months unless otherwise stated.
 - (l) Dayworks are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
 - (m) A Defect is any part of the Works not completed in accordance with the Contract.
 - (n) The Defects Liability Certificate is the certificate issued by Project Manager upon correction of defects by the Contractor.

- (o) The Defects Liability Period is the period **named in the SCC** pursuant to Sub-Clause 33.1 and calculated from the Completion Date.
- (p) Adjudicator means the single person appointed under Clause 23.
- (q) Drawings means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- (r) The Employer is the party who employs the Contractor to carry out the Works, **as specified in the SCC**.
- (s) Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- (t) "In writing" or "written" means hand-written, typewritten, printed or electronically made, and resulting in a permanent record;
- (u) The Initial Contract Price is the Contract Price listed in the Employer's Notification of award.
- (v) The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the SCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- (w) Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- (x) Plant is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- (y) The Project Manager is the person **named in the SCC** (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.
- (z) SCC means Special Conditions of Contract
- (aa) The Site is the area **defined as such in the SCC**.
- (bb) Site Investigation Reports are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.

- (cc) Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- (dd) The Start Date is **given in the SCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- (ee) A Subcontractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- (ff) Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- (gg) A Variation is an instruction given by the Project Manager which varies the Works.
- (hh) The Works are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the SCC.

2. Interpretation

- 2.1 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
- 2.2 If sectional completion is **specified in the SCC**, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
 - (a) Agreement,
 - (b) Notification of award,
 - (c) Contractor's Bid,
 - (d) Special Conditions of Contract,
 - (e) General Conditions of Contract,
 - (f) Specifications,
 - (g) Drawings,
 - (h) Bill of Quantities, and

- (i) any other document **listed in the SCC** as forming part of the Contract.
- 3. Language and Law
- 3.1 The language of the Contract must be English and the law governing the Contract is the Law of Namibia.
- 4. Project
 Manager's
 Decisions
- 4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.
- 5. Delegation
- 5.1 Otherwise **specified in the SCC**, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.
- 6. Communications
- 6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing to the addresses **specified in the SCC.** A notice shall be effective only when it is delivered.
- 7. Subcontracting
- 7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.
- 8. Other Contractors
- 8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as **referred to in the SCC.** The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.
- 9. Personnel and Equipment
- 9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 9.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.
- 10. Employer's and Contractor's Risks
- 10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

- 11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:
 - (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
 - (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
 - (ii) Negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.
 - (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
- 11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to
 - (a) a defect which existed on the Completion Date,
 - (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or
 - (c) the activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

12.1 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.

13. Insurance

- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the SCC** for the following events which are due to the Contractor's risks:
 - (a) loss of or damage to the Works, Plant, and Materials;
 - (b) loss of or damage to Equipment;
 - loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract;
 and

- (d) personal injury or death.
- 13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval within 21 days after issue of notification of award. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 13.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.
- 13.5 Both parties shall comply with any conditions of the insurance policies.
- 13.6 The policies which are in the joint names of the Contractor and the Employer shall contain a clause to include a waiver of subrogation of the Contractor's rights to the insurance carrier against the Employer.

14. Site Data

- 14.1 The Contractor shall be deemed to have examined any Site Data **referred to in the SCC**, supplemented by any information available to the Contractor.
- 15. Contractor to Construct the Works
- 15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.
- 16. The Works to Be Completed by the Intended Completion Date
- 16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.
- 17. Approval by the Project Manager
- 17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.
- 17.2 The Contractor shall be responsible for design of Temporary Works.
- 17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.

- 17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.
- 18. Safety
- 18.1 The Contractor shall be responsible for the safety of all activities on the Site.
- 19. Discoveries
- 19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.
- 20. Possession of the Site
- 20.1 The Employer shall, after receiving the Performance security, the insurance covers and the Program for the Works all as per requirements, give possession of all parts of the Site to the Contractor within thirty days for execution of works in accordance to the Program for the Works. If possession of a part is not given by the date **stated in the SCC**, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.
- 21. Access to the Site
- 21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.
- 22. Instructions
- 22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 22.2 The Contractor shall permit persons appointed by the Employer to inspect the Site and/or the accounts and records of the Contractor and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Employer if required by the Employer. The Contractor's attention is drawn to Sub-Clause 57.1 which provides, inter alia, that acts intended to materially impede the exercise of the inspection and audit rights provided for under Sub-Clause 22.2 constitute a prohibited practice subject to contract termination.
- 23. Appointment of the Adjudicator
- 23.1 The Adjudicator shall be appointed jointly by the Employer and the Contractor, at the time of the Employer's issuance of the Notification of award. If, in the notification of award, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority **designated in the SCC**, to appoint the Adjudicator within 15 days of receipt of such request.
- 23.2 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract; a new Adjudicator

shall be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the SCC** at the request of either party, within 30 days of receipt of such request.

24. Procedure for Disputes

- 24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 15 days of the notification of the Project Manager's decision.
- 24.2 The Adjudicator shall give a decision in writing within 30 days of receipt of a notification of a dispute.
- 24.3 The Adjudicator shall be paid by the hour at the **rate specified in the SCC**, together with reimbursable expenses of the types **specified in the SCC**, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within thirty (30) days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above thirty (30) days, the Adjudicator's decision shall be final and binding.
- 24.4 The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place specified **in the SCC.**

B. Time Control

25. Program

- 25.1 Within the time **stated in the SCC**, after the date of the Notification of award, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.
- 25.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 25.3 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period **stated** in the SCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount **stated in the SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall provide an updated

- Activity Schedule within 15 days of being instructed to by the Project Manager.
- 25.4 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

- 26.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event (as defined in GCC 41) occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.
- 26.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

27. Acceleration

- 27.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.
- 27.2 If the Contractor's priced proposals for acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.
- 28. Delays
 Ordered by the
 Project
 Manager
- 28.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

29. Management Meetings

- 29.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 29.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either

at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

30. Early Warning

- 30.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
- 30.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

31. Identifying Defects

- 31.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
- 32. Tests
- 32.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

33. Correction of Defects

- 33.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is **defined in the SCC.** The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 33.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

34. Uncorrected Defects

34.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

D. Cost Control

35. Contract Price

35.1 In the case of an admeasurement contract, the Bill of Quantities shall contain priced items for the Works to be performed by the

Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.

35.2 In the case of a lump sum contract, the Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to prepare interim valuations of works done.

Any errors or inconsistencies including front loading detected in the Activity Schedule at any time during the execution of the project shall be resolved as directed as by the Project Manager.

36. Changes in the Contract Price

- 36.1 In the case of an admeasurement contract:
 - (a) If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.
 - (b) The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.
 - (c) If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.
- 36.2 In the case of a lump sum contract, the Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

37. Variations

- 37.1 All Variations shall be included in updated Programs, and, in the case of a lump sum contract, also in the Activity Schedule, produced by the Contractor.
- 37.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.
- 37.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
- 37.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered

- without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 37.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
- 37.6 In the case of an admeasurement contract, if the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Sub-Clause 38.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.

38. Cash Flow Forecasts

38.1 When the Program, or, in the case of a lump sum contract, the Activity Schedule, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast.

39. Payment Certificates

- 39.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 39.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 39.3 The value of work executed shall be determined by the Project Manager.
- 39.4 The value of work executed shall comprise:
 - (a) In the case of an admeasurement contract, the value of the quantities of work in the Bill of Quantities that have been completed; or
 - (b) In the case of a lump sum contract, the value of work executed shall comprise the value of completed activities in the Activity Schedule.
- 39.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 39.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- 39.7 Unless **otherwise specified in the SCC** Interim Payment may be made for Plant and Material delivered on site ready for incorporation within reasonable period of time in the permanent works, subject to the Contractor transferring ownership to the

Employer and providing, where applicable, the right of the transfer of ownership vested upon the Contractor by its supplier.

Notwithstanding the transfer of ownership, the responsibility for care and custody thereof together with the risk of loss or damage thereto shall remain with the Contractor until taking over of the works or part thereof in which such Plant and Materials are incorporated and shall make good at its own cost any loss or damage that may occur to the works or part thereof from any cause whatsoever during such period prior to the taking over.

40. Payments

- 40.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest at the legal rate.
- 40.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 40.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions to the Contract Price.
- 40.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

41. Compensation Events

- 41.1 The following shall be Compensation Events:
 - (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
 - (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
 - (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
 - (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.

- (e) The Project Manager unreasonably does not approve a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Notification of award from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effects on the Contractor of any of the Employer's Risks.
- (k) The Project Manager unreasonably delays issuing a Certificate of Completion.
- (1) In situations of Force Majeure which makes the contractor's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances. Such events shall be limited to:
 - (a) reason of any exceptionally adverse weather conditions (as specified in the BDS) and
 - (b) reason of civil commotion, strike or lockout affecting any of the trades employed upon the Works or any of the trades engaged in the preparation, manufacture or transportation of any of the goods or materials required for the Works.
- 41.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 41.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If

the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

- 41.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.
- 42. Tax
- 42.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 30 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 44.
- 43. Currencies
- 43.1 Where payments are made in currencies other than the currency of the Employer's country **specified in the SCC**, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.
- 44. Price Adjustment
- 44.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the SCC.** If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type indicated below applies to each Contract currency:

$P_c = A_c + B_c Imc/Ioc$

where:

P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c."

A_c and B_c are coefficients⁷ **specified in the SCC,** representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and

Imc is the index prevailing at the end of the month being invoiced and Ioc is the index prevailing 28 days before Bid opening for inputs payable; both in the specific currency "c."

The sum of the two coefficients A_c and B_c should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the nonadjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other nonadjustable components. The sums of the adjustments for each currency are added to the Contract Price. [To be transferred to the User Guide]

44.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

45. Retention

- 45.1 The Employer shall retain from each payment due to the Contractor the proportion **stated in the SCC** until Completion of the whole of the Works.
- 45.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 53.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an "on demand" Bank guarantee.

46. Liquidated Damages

- 46.1 The Contractor shall pay liquidated damages to the Employer at the rate per day **stated in the SCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount **defined in the SCC.** The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.
- 46.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 40.1.

47. Bonus

47.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the SCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

48. Advance Payment

- 48.1 The Employer shall make advance payment to the Contractor of the amounts **stated in the SCC** by the date **stated in the SCC**, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.
- 48.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required

specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.

48.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

49. Securities

- 49.1 The Performance Security shall be provided to the Employer no later than the date specified in the Notification of award and shall be issued in an amount **specified in the SCC**, by a bank and denominated in the Namibian Dollars. The Performance Security shall be valid until a date 30 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee.
- 49.2 (a) Where the contractor has benefitted from the application of the Margin of Preference for employment of local manpower, it shall:
 - (i) in the execution of the contract, fulfill its obligation of maintaining local manpower force for 80 % or more of the man-days deployed in the execution of the Works with which it satisfied the criteria of eligibility for being awarded the contract in application of the Margin of Preference; and
 - (ii) Concurrently with the above performance security, provide a preference security to guarantee it will fulfill its obligation in that respect.
 - (b) For contracts above N\$ 5 M, the preference security shall be in the form of an "on demand" bank guarantee for an amount in a convertible currency equivalent to the difference between its bid price and the bid price of the lowest bid if the Margin of Preference was not applicable. It shall be issued by a commercial bank located in the Republic of [Insert name of country].
 - (c) For contracts up to N\$ 5 M, an amount equal to the value of the preference security shall be retained from progressive payments to the contractor, to constitute the guarantee for the preference security.
 - (d) The preference security shall be valid until the Contractor has completed the Works and a Completion Certificate has been issued by the Employer's Representative as per GCC 53.

- (e) The cost of providing the security shall be borne by the Contractor.
- 49.3 Where a Preference Security is applicable:
 - (i) the Employer's Representative shall monitor the employment of local manpower throughout the execution of the contract and shall from time to time request a report from the contractor on the percentage of total men-days deployed using local manpower.
 - (ii) the Contractor shall submit the local manpower employment reports as often as it is reasonably requested by the Employer's Representative.
 - (iii) the Employer's and Contractor's representatives shall consult each other to ensure that the Contractor's obligation towards local manpower employment is met during the Works execution.
 - (iv) At the time of works completion, the Contractor shall submit a certified audited report to the Employer to substantiate the actual percentage of local manpower employed throughout the execution of the works.
 - (v) The preference security shall be forfeited by the employer in case of failure on the part of the contractor to employ at least 80% of the local manpower in the execution of the Works.

50. Dayworks

- 50.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 50.2 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
- 50.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

51. Cost of Repairs

51.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

52. Labour Clause

- 52.1 (a) The rates of remuneration and other conditions of work of the employees of the Contractor shall not be less favorable than those established for work of the same character in the trade concerned-
 - (i) by collective agreement applying to a substantial proportion of the workers and employers in the trade concerned;
 - (ii) by arbitration awards; or

- (iii) by Remuneration Regulations made under the Labor Act, 2007.
- (b) Where remuneration and conditions of work are not regulated in a manner referred to at (a) above, the rates of the remuneration and other conditions of work shall be not less favorable than the general level observed in the trade in which the contractor is engaged by employers whose general circumstances are similar.
- 52.2 No Contractor shall be entitled to any payment in respect of work performed in the execution of the contract unless he has, together with his claim for payment, filed a certificate:
 - (a) stating the rates of remuneration and hours of work of the various categories of employees employed in the execution of the contracts;
 - (b) stating whether any remuneration payable in respect of work done is due:
 - (c) Containing such other information as the Chief Executive Officer of the Public Body administering the contract may require to satisfy himself that the provisions under this clause have been complied with.
- 52.3 Where the Chief Executive Officer of the Public Entity administering the contract is satisfied that remuneration is still due to an employee employed under this contract at the time the claim for payment is filed under subsection *[GCC 41]*, he may, unless the remuneration is sooner paid by the Contractor, arrange for the payment of the remuneration out of the money payable under this contract.
- 52.4 Every Contractor shall display a copy of this clause of the contract at the place at which the work required by the contract is performed.

E. Finishing the Contract

- **53.** Completion
- 53.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.
- 54. Taking Over
- 54.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.
- 55. Final Account
- 55.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 60 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 60 days

a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

56. Operating and Maintenance Manuals

- 56.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates **stated** in the SCC.
- 56.2 If the Contractor does not supply the Drawings and/or manuals by the dates **stated in the SCC** pursuant to GCC Sub-Clause 55.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the SCC** from payments due to the Contractor.

57. Termination

- 57.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 57.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
 - (d) the Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;
 - (e) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days;
 - (f) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (g) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 60 days of the date of the Project Manager's certificate;
 - (h) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
 - (i) the Contractor does not maintain a Security, which is required;
 - (j) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the SCC**; or
 - (k) if the Contractor, in the judgment of the Employer, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract, pursuant to GCC Clause 57.1.
- 57.3 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed

- under GCC Sub-Clause 56.2 above, the Project Manager shall decide whether the breach is fundamental or not.
- 57.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 57.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

58. Fraud and Corruption

- 58.1 If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 15 days' notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of Clause 57 shall apply as if such expulsion had been made under Sub-Clause 57.5 [Termination by Employer].
- 58.2 Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with Clause 9.
- 58.3 For the purposes of this Sub-Clause:
 - (i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (v) "obstructive practice" is
 - (a) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

(b) acts intended to materially impede the exercise of an inspection and audit rights provided for under Sub-Clause 22.2.

59. Payment upon Termination

- 59.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as **indicated in the SCC.** Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.
- 59.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

60. Property

60.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.

61. Release from Performance

61.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

Section VII. Special Conditions of Contract

These clauses should be read in conjunction with the General Conditions of Contract

	A. General
GCC 1.1 (r)	The Employer is <i>Erongo Regional Council</i> represented by D van Rensburg
GCC 1.1 (v)	The Intended Completion Date for the whole of the Works shall be 6 Months from date of award.
GCC 1.1 (y)	The Project Manager is ALV Consulting Engineers.
GCC 1.1 (aa)	The Site is located at Uis Settlement. Google location: 21°13'07"S/14°52'03."E and is defined in drawings No. ALV25/ERC/P01-LM
GCC 1.1 (dd)	"The Start Date shall be 7 days after handing over site
GCC 1.1 (hh)	The Works consist of Replacement Of Bulk Water Pipeline For A Distance Of 3km In Uis Settlement Area, Erongo Region.
GCC 2.2	Sectional Completions are: IS NOT APPLICABLE
GCC 2.3(i)	The following documents also form part of the Contract: <i>Drawings, Activity Schedule, and Project Specifications</i>
GCC 5.1	The Project manager <i>may</i> delegate any of his duties and responsibilities.
GCC 6.1	Delivery address for notices is:
	Employer: Erongo Regional Council, Private Bag 5019, Swakopmund Namibia.
	Contractor:
	Name:
	Address:
	Email
	Fax No.:
GCC 8.1	Schedule of other contractors: <i>Not Applicable</i>
GCC 13.1	Except for the cover mentioned in (d)(i) hereunder, the other insurance covers shall be in the joint names of the Contractor and the Employer and the minimum insurance amounts shall be:
	(a) for the Works, Plant and Materials: (for the full amount of the works including removal of debris, professional fee etc)

 (b) for loss or damage to Equipment: (for the replacement value of the equipment that the contractor intends to use on site until the taking over by the Employer. (c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract for an amount representing the value of the properties that are exposed to the action of the contractor in the execution of the works. It will extend to the property of the Procuring Entity as well). (d) for personal injury or death: (i) of the Contractor's employees: [The Contractor shall take an adequate insurance cover for its employees for any claim arising in the execution of the works]. (ii) of other people: [This cover shall be for an adequate amount for Third Party extended to the Employer and its representatives]. (e) for loss or damage to materials on-site and for which payment have been included in the Interim Payment Certificate, where applicable. The Contractor shall choose to take the insurance covers indicated above as separate covers or a combination of the Contractor's All Risks coupled with the Employer's liability and First Loss Burglary, after approval of the Employer. All insurance covers shall be of nil or the minimum possible deductibles at sole expense of the contractor.
Site Data are: Refer to drawings section of this document
The Site Possession Date(s) shall be: within 7 days after receiving Notification of award.
Appointing Authority for the Adjudicator: No Adjudicator shall be appointed for this Contract.
In case a dispute of any kind arises between the Employer and the Contractor in connection with, or arising out of, the contract or the execution of works or after completion of works and whether before or after repudiation or other termination of Contract, including any dispute as to any opinion, instruction, determination, certificate or valuation of the Employer's Representative, the matter in dispute shall, in the first place, be referred in writing to the employer's representative, with a copy to the other party. The Employer and the Contractor shall make every effort to resolve the dispute
amicably by direct informal negotiation. If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Public Entity or the Contractor may give notice to the other party of its intention to refer the matter to:
"Commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given."

	or
	"the competent courts of Namibia"
GCC 24.3	Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: Not applicable.
GCC 24.4	For large contracts with domestic contractor or for contract with foreign contractor:
	Any dispute or difference in respect of which a notice of intention to commence arbitration has been given shall be finally settled by arbitration in accordance with Namibian Laws by an Arbitrator to be appointed by both parties to the dispute or in any case of disagreement, by an Arbitrator to be appointed by a judge in Chambers of Namibia. The Arbitrator fees will be borne by the losing party. Any decision of the Arbitrator shall be final and binding to both parties".
	Not Applicable"
	B. Time Control
GCC 25.1	The Contractor shall submit for approval a Program for the Works within 21 days from the date of the Notification of award.
GCC 25.3	The period between Program updates: 30 Days.
	The amount to be withheld for late submission of an updated Program is
	N\$5000.00 NON REFUNDABLE
	C. Quality Control
GCC 33.1	The Defects Liability Period is: 365 days
GCC 39.7	Interim Payment for Plant and Material on site <i>is</i> applicable at 80% of the value of the material.
	No payment of any such plant and material on site will be made to the contractor unless one of the following documents is provided with the contractor's statement:
	 Proof of ownership of the material/plant
	A written cession of ownership from the supplier to the contractor
	A bank guarantee for the full amount of the claim from an approved financial institution; or
	Written permission to the client to pay the supplier directly
	D. Cost Control

GCC 40	The amount shall be paid upon availability and receipt of funds by the Employer/client from the funding agency namely, Ministry of Urban and Rural Development.
GCC 41.1 (l)	Abnormal Climatic Conditions be it rain, hail, dust storms or extreme temperatures, which makes it unsafe for workers to continue working.
GCC 43.1	The currency of the Employer's country is: Namibian Dollars.
GCC 44.1	The Contract is not subject to price adjustment in accordance with GCC Clause 44, and the following information regarding coefficients does not apply.
GCC 45.1	The proportion of payments retained is: 10%.
	Maximum retention shall be 5% of contract sum after partial practical completion.
GCC 46.1	The liquidated damages for the whole of the Works are N\$ 2, 500.00 per Day
	The maximum amount of liquidated damages for the whole of the Works is 5% max of contract price
GCC 47.1	The Bonus for the whole of the Works is <i>NOT APPLICABLE on Contract Price</i> per day. The maximum amount of Bonus for the whole of the Works is <i>N/A</i> on the final Contract Price.
GCC 48.1	The Advance Payments shall be: <i>Not applicable</i>
GCC 49.1	The Performance Security amount is: 10 % of the contract Sum.
	(a) Bank Guarantee: 10 % of Contract Amount.
	And shall be released 30 days after issuing of the practical completion certificate
	E. Finishing the Contract
GCC 55.1	The date by which operating and maintenance manuals are required is 7 days after practical Completion.
	The date by which "as built" drawings are required should be <i>14 days</i> after the issue of the completion certificate.
GCC 55.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required in GCC 56.1 is <i>N\$5000.00</i>
GCC 56.1	Operating and maintenance manuals should be supplied to the employer by the contractor no later than: 7 days after practical completion
GCC 56.1	Amount to be withheld should the maintenance and operation manuals not be provided is: [5 000.00 NAD]
GCC 57.2 (j)	The maximum number of days is: 120 days.
GCC 59.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is 10%.

Section VIII - Contract Forms

[This Section contains forms that, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.]

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CONTRACT AGREEMENT

S AGREEMENT made on the day of
veen Erongo Regional Council (hereinafter "the Employer"), of the one part, and
ne of the Contractor] (hereinafter "the Contractor"), of the other part:
EREAS the Employer desires that the Works known as Replacement Of Bulk Water Pipeline
A Distance Of 3km In Uis Settlement Area, Erongo Region.should be executed by the
tractor, and has accepted a Bid by the Contractor for the execution and completion of these
ks and the remedying of any defects therein,
Employer and the Contractor agree as follows:
In this Agreement words and expressions shall have the same meanings as are respectively
assigned to them in the Contract documents referred to.
The following documents shall be deemed to form and be read and construed as part of this
Agreement. This Agreement shall prevail over all other Contract documents.
(a) the Notification of award
(b) the Bid
(c) the Addenda Nos
(d) the Appendix to the General Conditions of Contract
(e) the General Conditions of Contract;
(f) the Specification
(g) the Drawings; and
(h) the completed Schedules,
In consideration of the payments to be made by the Employer to the Contractor as indicated in

this Agreement, the Contractor hereby covenants with the Employer to execute the Works and

to remedy defects therein in conformity in all respects with the provisions of the Contract.

Section VIII – Contract Forms 160

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Namibia on the day, month and year indicated above.

Signed by:	Signed by:
for and on behalf of the Employer	for and on behalf the Contractor
in the	in the
presence of:	presence of:
Witness, Name, Signature, Address, Date	Witness, Name, Signature, Address, Date

This form is to be deleted if Performance Security is not applicable

APPENDIX TO CONTRACT

PERFORMANCE SECURITY (BANK GUARANTEE)

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

Date: [insert date (as day, month, and year) of Bid Submission]

Procurement Reference No. and title: [insert no. and title of bidding process]

Bank's Branch or Office: [insert complete name of Guarantor]

Beneficiary: [insert complete name of Purchaser]

PERFORMANCE GUARANTEE No.: [insert Performance Guarantee number]

We have been informed that [insert complete name of Supplier] (hereinafter called "the Supplier") has entered into Contract No. [insert number] dated [insert day and month], [insert year] with you, for the supply of [description of goods and related services] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a Performance Guarantee is required.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum(s) not exceeding [insert amount(s^8) in figures and words] upon receipt by us of your first demand in writing declaring the Supplier to be in default under the Contract, without cavil or argument, or your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This Guarantee shall expire no later than the [insert number] day of [insert month] [insert year],⁹ and any demand for payment under it must be received by us at this office on or before that date.

......Bank's seal and authorized signature(s)

⁸ The Bank shall insert the amount(s) specified in the SCC and denominated, as specified in the SCC, in the currency of the Contract.

Dates established in accordance with Clause 18.4 of the General Conditions of Contract ("GCC"), taking into account any warranty obligations of the Supplier under Clause 16.2 of the GCC intended to be secured by a partial Performance Guarantee. The Purchaser should note that in the event of an extension of the time to perform the Contract, the Purchaser would need to request an extension of this Guarantee from the Bank. Such request must be in writing and must be made prior to the expiration date established in the Guarantee. In preparing this Guarantee, the Purchaser might consider adding the following text to the Form, at the end of the penultimate paragraph: "We agree to a one-time extension of this Guarantee for a period not to exceed [six months] [one year], in response to the Purchaser's written request for such extension, such request to be presented to us before the expiry of the Guarantee."

Sample Form of Preference Security

Form of Preference Security (Bank Guarantee)

To:	
	[address of Employer]
WHEREAS	[name and addresses of the
contractor] (hereinafter called "the Contractor"), has undertaken dated to execute	=
[name of Contract and brief Description of Works], (hereinafter call	
AND WHEREAS it has been stipulated by you in the said (
furnish you with a Bank Guarantee by a local commercial bank for the for compliance with his obligation stated in Sub-Clause 49.2 of the G	
AND WHEREAS we have agreed to give the Contractor suc	h a Bank Guarantee;
NOW THEREFORE we hereby affirm that we are the Guarbehalf of the Contractor, up to a total of	
undertake to pay you, upon your first written demand and without demand any sum within the limit of	your having to substantiate such
We hereby waive the necessity of demanding the said depresenting us with the demand.	lebt from the Contractor before
We further agree that no change or addition to or other modific or of the Works to be performed thereunder or of any of the Contract between you and the Contractor shall in anyway release us from liab hereby waive notice of any such change, addition or modification.	et documents which may be made
This guarantee is valid until the date of the Completion Certi	ficate.
Signature and Seal of the Guarantor	
Name of Bank	
Address	
Date	

Amount to be inserted by the Guarantor in accordance with Sub-Clause 49.2 of the General Conditions of Contract

Advance Payment Security

[Bank's Name, and Address of Issuing Branch or Office]

Beneficiary:[Name and Address of Employer]
Date:
Advance Payment Guarantee No.:
We have been informed that [name of the Contractor] (hereinafter called "the Contractor") has entered into Contract No [reference number of the Contract] dated with you, for the execution of [name of contract and brief description of Works] (hereinafter called "the Contract").
Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum [name of the currency and amount in figures] 1 ([amount in words]) is to be made against an advance payment guarantee.
At the request of the Contractor, we [name of the Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [name of the currency and amount in figures]* ([amount in words]) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.
It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number [Contractor's account number] at [name and address of the Bank]
The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that eighty (80) percent of the Contract Price has been certified for payment, or on the day of , whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date. [Seal of Bank and Signature(s)]

Note —

All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

- 1 The Guarantor shall insert an amount representing the amount of the advance payment denominated in Namibian Dollars as specified in the Contract.
- 2 Insert the expected expiration date of the Time for Completion. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.