



STANDARD BIDDING DOCUMENTS

GUYANA POWER AND LIGHT INC

Procurement of Works

**REHABILITATION OF PERIMETER FENCES, GUARD HUT AND
DEMOLITION OF BUILDING AT KINGSTON POWER STATION
COMPOUND, KINGSTON, GEORGETOWN**

IFB # GPL - PD - 031 - 2021

MARCH 2021

**Closing Date: Friday April 9, 2021 @ 14:00 hrs (2:00pm)
Bid Opening: Friday April 9, 2021 @ 14:30 hrs (2:30pm)**

Invitation for Bids (IFB)
Co-operative Republic of Guyana
IFB # GPL - PD - 031 - 2021

The Guyana Power and Light Inc. invite sealed bids from qualified bidders for the

REHABILITATION OF PERIMETER FENCES, GUARD HUT AND DEMOLITION OF BUILDING AT KINGSTON POWER STATION COMPOUND, KINGSTON, GEORGETOWN.

Interested bidders may obtain further information from the Project Manager's (Civil Engineer's Office), Guyana Power & Light 257/259 Middle Street, Cummings burg, Georgetown, Tel. 227-4604.

1. A complete set of bid documents can be purchased for a nonrefundable fee of G\$5,000.00 from the Secretary – Supply Chain Manager, Procurement, Guyana Power & Light Inc., 40 Main Street Georgetown Guyana or a copy can be downloaded from our web site <http://www.gplinc.net>
2. Qualification requirements include valid Income Tax and NIS Compliance Certificates, Work Programme, List of Similar Projects, List of Equipment Available for the Project. If the Bid is from a firm/company, a copy of the business registration must be attached.
3. Sealed Bids must be delivered to The Secretary to the Tender Board, Guyana Power & Light, 91 Duke Street, Kingston, and Georgetown on or before **2:00 p.m. on Friday April 9, 2021.**
4. Bid opening is schedule for **14:30hrs (2.30 pm) on Friday April 9, 2021** in GPL'S Board Room, 91 Duke Street, Kingston in the presence of bidders / representatives who choose to attend in person.
5. Bidders downloading the bid document are advised to forward a registration email to ajohnson@gplinc.com, [gpsaud@gplinc.com](mailto:gpersaud@gplinc.com) or proc_mng_sect@gplinc.com stating the following: Name of bidder, Address, Contact No and Email address.

The above information will be used to inform bidders of any amendments to the bidding document and also to forward all responses to queries.

6. All bids "shall" be accompanied by a "Bid Security" of 2 % of the bid price.
7. The Guyana Power & Light is not obligated to accept the lowest or any bid.

Note: Any bidder/representative who chooses to attend the opening of this bid will be subjected to entry protocols in keeping with the COVID-19 pandemic. Only one (1) representative is allowed per entity and the representative will be subject to body temperature test, hand sanitizing and mandatory use of face mask at all times. Failed body temperature test and/or resistance to comply with the aforementioned will prohibit your participation in the bid opening.

C O N T E N T S

Invitation for bids (IFB)	2
Instructions to bidders (ITB)	4
Bid data sheet (BDS)	18
General conditions of contract (GCC)	19
Special conditions of contract (SCC)	33
Drawings	35
Bill of quantities and table of consumable materials	42
Technical specifications	64
Qualification information	84
Sample forms	
1. Form of Bid.....	86
2. Form of Contract, Work Order and Settlement.....	88
3. Form of Bid Security.....	91
4. Form of Performance Security.....	92
5. Form of Bank Guarantee for Advance Payment.....	93
6. Letter of Acceptance.....	94
7. Power of attorney for signing the bid.....	95
Evaluation Criteria.....	96

INSTRUCTIONS TO BIDDERS (ITB)

A. Introduction

1. Scope of works and Source of Funds

The Procuring entity is The Guyana Power and Light, Inc. hereinafter referred to as “the Employer”) for the execution of the Works described in the *Bid Data Sheet*. *Works will be funded by Guyana Power and Light, Inc.*

2. Eligible Bidders

- 2.1 This Invitation for Bids is open to all contractors from any country, exclusive of those prohibited by the legislation of Guyana or by another international agreement the participant of which is Guyana.
- 2.2 A bidder may be an individual or legal entity, or a combination of any abovementioned forms with a formal intent to enter into an agreement or to operate under an existing agreement in the form of a Partnership.
- 2.3 Government and municipal enterprises may only participate if they are legally and financially autonomous, and if they are legally eligible to carry on business.
- 2.4 Bidders should not have a conflict of interests, should not be associated (nor have been associated in the past), directly or indirectly, with any firm or any of its affiliates that has been engaged by the Employer to provide consulting services at preparation stage of the bidding documents, technical specifications, project and other documents to be used for procurement of works in accordance with this Invitation for Bids or being proposed as Engineer under this Contract.
- 2.5 A Bidder or any affiliate that has been engaged by the Employer to perform consulting services at preparation stage of the bidding and other documents shall not be entitled to participate in bidding, and if conflict of interests is found, bidder’ bid shall be rejected.
- 2.6 Bidders should provide information on legal status, place of registration and principal type of business; a license to execute the works specifying identification number and validity period, and a written power of attorney of the signatory of the bid to assume obligations on behalf of the Bidder;
- 2.7 The bidder should not have more than one improperly performed procurement contract within the past two years preceding the commencement of the present procurement proceeding.

- 2.8 The bidder should not be insolvent, bankrupt, their property should not be controlled by judicial authority, their cases should not be commanded by court or by the person appointed by court, their commercial activities should not be suspended, and they should not be a subject of such judicial proceedings;
- 2.9 The bidder should fulfill the tax and social insurance fund liabilities in Guyana;
- 2.10 Bidders, and their management personnel within three years preceding the commencement of procurement proceedings should not be associated with giving false information or a misrepresentation as to their qualification information for the purposes of entering into a procurement contract;
- 2.11 Bidders should provide information on the total annual volume of construction works executed for each of the last three years;
- 2.12 Bidders should provide information on major items of construction equipment proposed to carry out the Contract;
- 2.13 Bidders should provide information on the qualifications and experience of key management and technical personnel proposed for the Contract;

3. Qualifications of Bidders

- 3.1 Information on bidders' qualifications is to be included in Annex No. 9 "Qualification Information" to be incorporated in the bid.
- 3.2 A bid submitted by a partnership or syndicate consisting of two or more firm-partners should comply with the following requirements:
 - (a) The bid shall include all the above-listed information for each partnership or syndicate partner;
 - (b) the bid shall be made up and signed so as to be legally binding on all partners;
 - (c) one of the partners shall be nominated as being in charge, and his authorities should be confirmed by authorization to be signed by the authorized signatories of all partners;
 - (d) the bid should incorporate a formal agreement of partnership (or a letter of intent to establish one) which specifies, inter alia, that all partners shall be liable jointly and severally for execution of the Contract, and that the partner in charge shall be entitled to incur liabilities and receive instructions for and on behalf of any and all partners, and all operations on the execution of the Contract, including payment shall be done exclusively by the partner in charge.

- 3.3 To qualify for award of the Contract, bidders should meet the following minimum qualifying criteria, and provide the following information and documents with their bids:
- (a) volume of construction work executed for the last 3 years should be not less than G\$ 150,000,000.00.
 - (b) To own or to have the possibility to lease, hire, etc. the essential construction equipment listed in the Qualification Information form;
 - (c) Managers and line employees with experience in executing works of a similar nature and size for not less than 5 (five) years;
 - (d) Specific experience – Participation as contractor, management contractor, or subcontractor, in at **least two (2) contracts** within the last **five (5) years**, each with a value of at least **\$30,000,000**, that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity methods/technology or other characteristics as described in the works requirements.

4. One Bid per Bidder

Each Bidder shall submit only one Bid, either individually or as a partner in a partnership or syndicate. All bids involving the Bidder who submits or participates in more than one Bid (exclusive of subcontractors, or permitted or required alternatives) shall be rejected from participation in bidding.

5. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of the bid. The Employer shall not be responsible or liable for those costs.

6. Site Visit

The Bidder, at the Bidder's own responsibility and risk, may visit and examine the Site of expected Works and its surroundings. All information obtained by the Contractor individually while visiting the site, may be used by him to prepare the bid and enter into the Contract. The costs of visiting the Site shall be at the bidder's own expense. The bid submission means that the Bidder has examined the Site of future Works and has accepted all the existing conditions.

B. List of documents included in the bidding documents

7. Content of Bidding Documents

- 7.1. The set of bidding documents includes the following:
- (a) Instructions to Bidders (ITB);

- (b) Bid Data Sheet (BDS);
- (c) General Conditions of Contract (GCC);
- (d) Special Conditions of Contract (SCC);
- (e) Form of Bid;
- (f) Qualification Information;
- (g) Drawings;
- (h) Bill of Quantities;
- (i) Technical Specifications;
- (j) Form of Contract;
- (k) Form of Bid Security;
- (l) Form of Performance Security;
- (m) Form of Bank Guarantee for Advance Payment;
- (n) Form of Power of Attorney for signing the bid.

7.2 The Bidder shall examine all instructions, forms, conditions and technical specifications incorporated in the bidding documents. Failure to provide all information required in the bidding documents, or submission of a non-responsive bid may result in rejection of his bid.

8. Clarification of Bidding Documents

8.1 The Bidder requiring any clarification of the bidding documents may address the Employer at the address *indicated in the Bid Data Sheet* in writing by fax or electronic messaging. The Purchaser will respond in writing to any request for clarification of the bidding documents to be received not later than 7 (seven) days prior to the deadline for submission of bids. Copies of response, including an explanation of matter's substance, but without identifying its source, will be forwarded by the Employer in writing to bidders who received the bidding documents within 3 (three) working days.

8.2 The Pre-bid conference will be conducted according to decision of the Purchaser and, if so, at the time, date and address indicated in the *Bid Data Sheet*. Before the conference Bidders may address the Employer with questions for the conference, and at the conference may ask any question and receive answer to the questions submitted regarding the bidding documents. All information obtained at pre-bid conference, requests of potential bidders related to clarification of the bidding documents, and responses to them shall be recorded by the Employer, and by the results of conference, a record is made and promptly communicated to all Bidders who received the bidding documents in order to enable bidders to take them into account when preparing their bids.

9. Amendment of Bidding Documents

9.1 In special circumstances, at any time before expiry of the deadline for submission of bids, the Employer, for any reason, whether at its own initiative or in response to

request for clarification forwarded by the Bidder, may modify the bidding documents by issuing addenda to it. Any addenda issued shall be a part of the bidding documents, and should be sent to all bidders who received the bidding documents from the Employer, which may be done by using fax or electronic message. Bidders should confirm the receipt of each addendum in writing or by fax or electronic message, and these addenda shall be binding.

- 9.2 In order to give Bidders enough time to take into account the amendments introduced while preparing their bids, the Purchaser, at his discretion, may extend the deadline for submission of bids.

B. Preparation of Bid

10. Language of Bid

The Bid prepared by the Bidder and all correspondence and documents related to this Bid that is exchanged by the Bidder and the Purchaser, should be written in the language *specified in the Bid Data Sheet*.

11. Documents Included in the Bid

The Bid prepared by the Bidder should include the following documents:

- (a) filled in Form of Bid;
- (b) qualification information and documents confirming that Bidder has a sufficient qualification required for the execution of the Contract in case if his bid accepted;
- (c) priced Bill of Quantities and priced list of consumable materials;
- (d) Bid Security provided in accordance with ITB Clause 15;
- (e) General Conditions of Contract and Special Conditions of Contract (signed by Bidder page-by-page);
- (f) Technical Specifications used for the execution of the Works;
- (g) Alternative offers (at the Purchaser's request);
- (h) other documents to be filled in by bidders in accordance with the requirements indicated in *the Bid Data Sheet*;
- (i) Power of attorney for signing the Bid.

12. Bid Price

- 12.1 The Contract is applicable to the whole amount of Works listed in priced Bill of Quantities and list of priced consumable material price presented by the Bidder in its bid.
- 12.2 The Bidder shall indicate the rates and prices for all kinds of works included in the Bill of Quantities, drawings and specifications. The kinds of works for which no rate and price is entered by the Bidder will not be paid for when executed, and it is considered that they are included in the rates and prices for other kinds of works.

12.3 When determining the bid price, the Bidder shall take into account the total value of labor, materials, plant, instruments, water, heat, electric power, transportation, machinery and equipment, and other services which are required during and for completion of the construction works.

12.4 All duties, taxes, and other levies payable by the Contractor under the current legislation of Guyana should be included in the bid price.

13. Bid Currency

The Bidder shall submit all documents on mutual settlements, and shall indicate the bid price in Guyana Dollars.

14. Period of Validity of Bids

14.1 Bids shall be valid during the number of days indicated in *the Bid Data Sheet* after the date of bid opening. The bid with shorter validity period should be rejected by the Employer as non-responsive to the bidding documents.

14.2 In exceptional circumstances, the Employer may request bidders to extend the period of validity of their bids for a certain period. Such requests and responses to them shall be made in writing, and may be sent by fax, telex or electronic mail. A Bidder may refuse the request on extension of the period of validity of his bid, without forfeiting the return of security. A Bidder agreeing to the request will not be required nor permitted to modify the bid, but will be required to extend the validity of bid security for a period of not less than 2(two) weeks after the expiry of the extended period of bid validity.

15. Bid Security

15.1 The Bidder should provide, as part of his bid, the bid security (not more than two percent of bid price) in the amount and form specified in *the Bid Data Sheet* with a validity period of not less than 2 weeks after the expiry of a period of bid validity.

15.2 The Bid security should be expressed in the bid currency, or in another freely convertible currency, and shall be a bank guarantee issued by the bank located in Guyana or by local correspondent bank in case when the security is issued by the foreign bank, or in any other form permitted by the Bid Data Sheet, such as debenture bond, cash, shares accepted for public transactions, certificates of deposit to bearer or promissory notes.

15.3 All bids not having a security shall be rejected by the Employer as non-responsive to the bidding documents.

- 15.4 The bid security shall be returned to unsuccessful Bidders as soon as possible but not later than fifteen (15) days upon the expiry of bid validity period, or after furnishing the performance security by successful bidder.
- 15.5 The successful Bidder shall receive the bid security after the signing of Contract pursuant to ITB Clause 34, and after furnishing the performance security (in the case when required).
- 15.6 The Bid security may be forfeited:
- (a) if the Bidder:
 - (1) withdraws his bid after the opening during the period of bid validity specified in his bid;
 - (2) does not agree with the correction of arithmetical errors in his bid.
 - (b) in case of the Contract award to Bidder, if this Bidder fails:
 - (1) to sign the Contract on the terms and conditions specified in his bid, in accordance with ITB Clause 31, or
 - (2) to furnish the Performance Security, in accordance with ITB Clause 32.
- 16. Alternative offers at the request of the Purchaser**
- 16.1 The Purchaser may request in the Bidding Documents for bid submission taking into account alternative conditions. In this case all requirements of the bidding documents are applied to alternative offers to that extent as well as to basic offers. The alternative offers shall not be considered, unless allowed or required in the bidding documents. **Alternative Bids are not Permitted.**
- 16.2 If so allowed by *the Bid Data Sheet*, the bidders wishing to submit the bids, taking into account the alternative conditions must also submit the bids that comply with the requirements of the bidding documents, including the basic technical features as indicated in the drawings and specifications. In addition to submitting the basic Bid, the Bidders shall provide all information necessary for a complete evaluation of the alternative conditions by the Purchaser, including design calculations, technical specifications, breakdown of prices, proposed construction methods and other relevant details.
- 16.3 Only the alternatives of Bidder who submitted the lowest evaluated Bid in accordance with the basic requirements of the bidding documents shall be considered by the Purchaser.

16.4 The Bidder, in his Bid, shall indicate the basic price of works to be executed, in accordance with the requirements of the bidding documents, and individually the price of works to be executed using the alternative offer.

17. Format and Signing of Bid

17.1 The Bidder should prepare 1 (one) original and 1 (one) or more copy/copies (as specified) of the bid clearly marking each as "**ORIGINAL OF THE BID**" and "**COPY OF THE BID**" accordingly. In the case of discrepancies between them, the original shall prevail.

17.2 The original and all copies of the bid shall be typed or written in indelible ink, and shall be signed by the Bidder or by a person (persons) having all authorities to sign the bid and obligations under the Contract. Permission to sign the bid should be specified in the power of attorney to be provided with the bid. All pages of the bid where new information, change or erasure inserted should be initialed (signed) by the person or persons signing the bid.

17.3 The bid shall contain no interlineations, erasures or overwriting, exclusive of the cases when the Bidder needs to correct errors which should be initialed by the person or persons signing the bid.

D. Submission of Bids

18. Sealing and Marking of Envelopes with Bids

18.1 The Bidder shall seal the original and each copy of the bid in separate envelopes, duly marking the envelopes as "**ORIGINAL**" and "**COPY.**" The envelopes shall then be sealed in an outer envelope.

18.2 The inner and outer envelopes shall:

- (a) be addressed to the Employer at the address specified in the Invitation for Bids;
- (b) bear the Invitation for Bids (IFB) name and number, and the words "**DO NOT OPEN BEFORE**" (2:30 pm on Friday April 9, 2021);
- (c) Name and address of the Bidder

18.3 If the outer envelope is not sealed and marked as required by ITB Clause 18.2, the Employer will assume no responsibility for the bid's misplacement or premature opening.

18.4 Bidder must submit valid certificates of compliance from Guyana Revenue Authority (GRA) and National Insurance Scheme (NIS), and VAT registration (*where applicable*)

19. Deadline for Submission of Bids

19.1 Bids must be received by the Employer at the address and on the dates specified in *the Bid Data Sheet*.

19.2 The Employer may, at his discretion, postpone the deadline for submission of bids for later period by modifying the bidding documents, and in this case the validity period of all rights and obligations of the Employer and the Bidders shall be extended subject to the changed deadline date.

20. Late Bids

All bids received by the Purchaser after the deadline for submission of bids specified by the Employer shall be rejected and returned to Bidder unopened.

21. Modification and Withdrawal of Bids

21.1 The Bidder may modify or withdraw his bid after the bid submission, provided that the Employer will receive a written notice of modification or withdrawal of the bid before the expiry of determined deadline for submission of bids, duly signed by an authorized representative, and accompanied by a copy of the authorization.

21.2 The Bidder's modification or withdrawal notice should be prepared, sealed, marked, and sent in accordance with the provisions of ITB Clause 18. In this case the outer and inner envelopes shall be additionally marked "**MODIFICATION**" or "**WITHDRAWAL**", as appropriate. A withdrawal notice may also be sent as a telegram by telex or fax with a subsequent written confirmation though post-office not later than the deadline for submission of bids.

21.3 No changes should be added in the bids after the expiry of the period determined for bid submission.

21.4 No bid may be withdrawn or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity indicated by the Bidder on the Bid Form. Withdrawal of the bid during this interval may result in the Bidder's forfeiture of his bid security, in accordance with ITB Clause 15.6.

E. Opening and Evaluation of Bids

22. Opening of Bids by Employer

22.1 The Employer will open all bids in the presence of bidders' representatives who wish to attend it at the time, on the date, and at the address specified in *the Bid Data Sheet*. The bidders' representatives who are present shall sign a register evidencing their attendance.

- 22.2 The envelopes marked as “**WITHDRAWAL**” and “**MODIFICATION**” will be opened first and read out. In this case the bids for which a withdrawal notice has been sent in accordance with Clause 21, the envelopes shall be returned to Bidders unopened.
- 22.3 The bidders’ names, the Bid prices, including alternatives (if alternatives permitted), price reduction specified in the Bidder’s bid, information on the presence or absence of required Bid Security, information on the presence (absence) of tax debts and debts of social insurance payments will be announced at the opening. No bid may be rejected in the bid opening, exclusive of the late bids which should return to Bidder unopened.
- 22.4 Bids (and modifications sent pursuant to ITB Clause 21.2) that have not been opened and read out at the opening shall not be accepted for further evaluation, irrespective of circumstance.
- 22.5 The Employer shall maintain the minutes of Bid opening where information to be disclosed to those who are present and to be promptly sent to the Authorized State Procurement Body is included.

23. Confidentiality Observance and Contacting the Purchaser

- 23.1 Information relating to the examination, evaluation and comparison of bids, and recommendations for the award of a Contract shall not be disclosed to other persons interested in this process until information on award of the Contract will be given to all Bidders.
- 23.2 No Bidder shall contact the Employer on any matter related to his bid from the date of bid opening and until the date of contract award, exclusive of requests for clarification of the bid.
- 23.3 Any effort on the part of any Bidder to influence the Employer’s decision on the bid evaluation, bid comparison, or the Contract award may result in the rejection of this Bidder’s Bid.

24. Clarification of Bids

During the bid evaluation, the Employer may, at his discretion, request the Bidder to give clarifications on his Bid. The request for clarification and the response should be given in writing, and in this case no change in the price or substance of the bid

shall be sought, offered, or permitted, exclusive of the cases when required to correct arithmetical errors discovered by the Employer during the evaluation of bids in accordance with ITB Clause 26.

25. Preliminary examination of Bids

- 25.1 Prior to the detailed evaluation of bids, the Employer will examine the bids in order to determine whether they meet the eligibility criteria; whether there is a bid security, whether the documents have been properly signed; whether they are substantially responsive to the requirements of the bidding documents.
- 25.2 A substantially responsive bid is one which satisfies all the above provisions without a material deviation, reservation or omission. A material deviation reservation or omission is one:
- a) which affects in any substantial way the scope, quality, or performance of the Works;
 - b) which limits in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the Bidder's obligations under the Contract; or
 - c) whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

They concern, for example, such important provisions as the bid security, bidders' qualification information, and effect on the scope, quality, or performance of the works, taxes and insurance payments are deemed a material deviation. Determination by the Employer of each bid's degree of responsiveness to those requirements should be based on the content of the bid itself without reference to any additional sources.

- 25.3 The Employer may waive any minor nonconformity, small mistake or inaccuracy in the bid which are not a material deviation from the requirements of the bidding documents, and such non-conformity or inaccuracy shall not influence on evaluation of the bid. When the minor omissions do affect the evaluation of the bid (e.g., costs to the Employer, or other aspects of the required performance), the minor deviations should be quantified in monetary terms, with corresponding adjustments to the bid price (only for the purposes of comparing bids)
- 25.4 If the bid is not substantially responsive to the qualification requirements, it shall be rejected by the Employer, and may not be subsequently accepted as responsive after inclusion of appropriate corrections made by the Bidder.

26. Correction of Arithmetical Errors in Bids

- 26.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetical errors. Errors will be corrected by the Employer as follows:
- (a) when there is a discrepancy between the value expressed in figures and words, the value in words will govern; and
 - (b) when there is a discrepancy between the unit rate and the total resulting from multiplying the unit rate by the quantity, the unit rate will govern, unless in the opinion of the Employer, there is an obviously gross misplacement of the

decimal fraction, in this case the total will govern and the unit rate will be corrected.

- 26.2 The value indicated in the bid, by the Bidder's consent, will be adjusted by the Employer in accordance with the above-stated rules of correction of errors, and is deemed mandatory to the Bidder. If the Bidder does not accept the corrected bid price, the Bid shall be rejected, and the bid security may be forfeited in accordance with Clause 15.6.

27. Evaluation and Comparison of Bids

- 27.1 The Employer will evaluate and compare only the bids determined to be substantially responsive to the requirements of the bidding documents in accordance with Clause 25.
- 27.2 When evaluating the bids, the Employer will determine for each Bid, the Evaluated Bid Price by adjusting the Bid Price as follows:
- (a) Correction of arithmetical errors pursuant to Clause 26;
 - (b) Exclusion of provisional sums and costs for contingencies pursuant to the Bill of Quantities;
- 27.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the bidding documents or otherwise result unsolicited benefits for the Employer will not be taken into account in bid evaluation.

F. Award of Contract

28. Award Criteria

Exclusive of the cases provided for in Clause 29, the Employer will award the Contract to the Bidder whose bid is determined to be substantially responsive to the bidding documents, and who offered the Lowest Evaluated Bid Price, provided that

this Bidder has been determined to be (a) eligible in accordance with Clause 2 and (b) met with qualification requirements in accordance with Clause 3.

29. Employer's Right to accept any Bid and Reject any or All Bids

- 29.1 The Employer reserves the right to accept or reject any or all bids, and to annul the bidding process at any time prior to the award of Contract, without thereby incurring any liabilities to bidders.
- 29.2 In case when the bidding process annulled, the Employer should, during 3 working days, send to all Bidders a notification indicating the reasons which served as a ground for the annulment, without giving evidences of that ground.

30. Notification of Award

- 30.1 Within 3 days after the conducted selection of the successful Bidder, and before the expiry of the period of bid validity, the Employer will notify the successful Bidder by telex, fax or email confirming by registered letter that his bid has been determined to be successful. This letter (hereinafter and in «*the General Conditions of Contract*» called «the Letter of Acceptance») should refer to the sum that the Employer shall pay to the Contractor for execution of the Works in accordance with the Contract (hereinafter and in the Contract called «the Contract Price»).
- 30.2 The notification of award shall be equivalent to entering into a Contract, subject to the Bidder providing the performance security pursuant to Clause 32 and will sign the Contract pursuant to Clause 31.
- 30.3 At the same time that notification of award is given to the successful bidder, the Employer shall notify other bidders in writing of the selection, including the name of the successful bidder and the bid price. The Employer shall also publish a notice in the Public Procurement Bulletin indicating the name and address of the successful bidder and the bid price quoted by him.
- 30.4 Unsuccessful bidders may request in writing to the Employer for a debriefing seeking explanations for the failure of their bids. The Employer shall promptly respond in writing to any unsuccessful Bidder who requests the Employer in writing to explain on which grounds its bid was not selected.

31. Signing of Contract

- 32.1 At the same time with notification of award, the Employer will send to the successful Bidder, the Form of Contract contained in the Bidding documents.
- 31.2 During seven (7) days of the receipt of a written Notice of acceptance and the Form of Contract, the successful Bidder should sign and date the Contract, and return it to the Purchaser.

32. Performance Security

- 32.1 Together with the signed Contract, the successful Bidder will send to the Employer, the Performance Security in the amount indicated in *the Bid Data Sheet*.
- 32.2 If the successful Bidder fails to provide the performance security, or during 7 (seven) days does not return the Contract signed, then the Employer shall reject the bid and confiscate the bid security, in that case the Employer shall award the Contract to the next evaluated Bidder, whose bid is substantially responsive and is determined by the

Employer to be qualified to perform the Contract satisfactorily, subject to the Employer's right to reject all bids in accordance with Clause 29, and the applicable Law and Regulations.

33. Corrupt and Fraudulent Practices

33.1 The Employer requires that the Bidders observe the highest standards of ethics during the procurement and execution of such Contracts. In pursuance of this policy, the Employer:

(a) for the purposes of provisions of this Clause, uses the following notions:

- I. "corrupt practice" - means the offering, giving, the agreement requesting for remuneration in any form, or services rendering in order to influence the action of a public official in the procurement process or in contract execution; and
- II. "fraudulent practice" - means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract to the detriment of the Employer, including collusive practices among Bidders (prior to or after bid submission), to establish bid prices at artificial non-competitive level, and deprive the Employer of the benefits of free and open competition;
- III. "collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the Employer, designed to establish bid prices at artificial, noncompetitive levels; and
- IV. "coercive practice" means harming or threatening to harm (directly or indirectly), persons or their property to influence their participation in the procurement process or the execution of a contract;

(b) will reject the bid if it determines that the Bidder recommended for award of the Contract has engaged in corrupt, fraudulent, collusive or coercive practices during the bidding process or execution of a contract;

(c) will declare the Contractor for indefinite, or for a specified period of time to be ineligible to participate in the state-financed biddings in accordance with a Regulation on the establishment of Database of unreliable (unfair) suppliers and its application procedures.

34. Penalties

A penalty for slow or non-performance will be imposed as per the rate prescribed or Liquidated Damages. Slow or non-performance will be assessed against the project's approved work programme and will commence from the first quarter of the project life. (Note: This means that after 10 % of the contract sum is deducted for penalties, the Procuring Entity has the right to cancel the contract and demand all forms of damages).

Bid Data Sheet (BDS)

Below given the specific data on procurement of the works shall complement, supplement or amend the provisions of the Instructions to Bidders (ITB). Whenever there is a conflict between the provisions herein and the Instructions to Bidders, the former shall prevail.

Item No.	
ITB 1.1 and 8.1	Guyana Power and Light Inc. of 40 Main Street Georgetown Guyana Telephone #592-226-9598 Email: ajohnson@gplinc.com
ITB 1.1	The works are: REHABILITATION OF PERIMETER FENCES, GUARD HUT AND DEMOLITION OF BUILDING AT KINGSTON POWER STATION COMPOUND, KINGSTON, GEORGETOWN. - IFB # GPL-PD-031-2021
ITB 1.1	The source of financing is: Works will be funded by the Guyana Power and Light, Inc.
ITB 8.2	Whether the pre-bid conference shall or shall not be held: No Pre-bid conference will be held
ITB 3.3 (b)	Period for providing information on the total annual volume of construction work executed shall be three (3) years.
ITB 4	Each Bidder shall submit one Bid only.
ITB 10.1	The language of Bid is English
ITB 11.1 (i)	N/A
ITB 14.1	The period of Bid validity is One Hundred and twenty (120) days following the deadline for submission of bids.
ITB 15.1	The amount and form of Bid Security is two percent (2%) of bid Price
ITB 18.4	Valid Certificates of compliances from NIS, GRA and TIN Registration. Certificates must be in the name of the Contracting Firm submitting Bid. This is applicable to all locally registered firms.
ITB 32.1	A performance security is required in the amount of 10% of the contract price is required and may be in the form of a bank guarantee, check or cash.

General Conditions of Contract (GCC)

A. General provisions

1. Definitions

1.1 Below given terms in this Contract shall be interpreted as follows:

"**Bill of Quantities**" means the completed priced items of works and priced consumable materials which are the part of the Bid.

"The **Completion Date**" means the date of completion of the Works by the Contractor and shall be the date of issue of the Certificate of Completion by the Procuring Entity.

"**Contract**" means the Contract achieved between the Procuring Entity and the Contractor, and fixed as the form of Contract signed by the parties with all annexes and addenda to the Contract for the execution and completion of the Works.

"**Contractor**" means an individual or legal entity, or a partnership, whose Bid for the execution of the Works is accepted by the Procuring Entity.

"**Contractor's Bid**" means the completed bidding documents submitted by the Contractor to the Procuring Entity.

"**Contract Price**" means the amount to be paid to the Contractor under the Contract for the entire and duly performance of his contractual obligations.

"**Days**" mean calendar days; "**months**" mean calendar months.

"A **Defect**" means any part of the Works executed breaching terms of the Contract.

"The **Acceptance Report of Corrected Defects**" means the acceptance report drafted jointly by the Engineer and the Contractor after correction of defects by the Contractor.

"The **Defects Correction Period**" means the period to correct imperfections and defects indicated in the Special Conditions of Contract, and calculated from the Completion Date.

"**Drawings**" include all calculations, schemes, plans and other information provided, or approved by the Authorized Body for the execution of the Contract.

«**Compensation Events**» means the event defined in Clause 41 of the General Conditions of Contract.

"**Procuring Entity**" means the party, as defined in the SCC, which employs the **Contractor** to execute the Works.

"**Machinery and equipment**" mean all the Contractor's machinery, equipment and

vehicles to be brought temporarily to the Site for the execution of the Works.

"The Initial Contract Price" means the Contract Price indicated by the Procuring Entity in the Notice of Award.

"The Expected Period of Completion" means the period within which the Contractor should complete the execution of the Works indicated in the SCC.

"Materials" means all consumable and raw materials to be used by the Contractor or any subcontractor during the execution of the Works.

"Plant" means the integral part of the Works which has a mechanical, electrical, chemical or biological function.

"Engineer" means a competent person, identified in the SCC, appointed by the Procuring Entity to be the Engineer, and notified to the Contractor, to be responsible for supervising the execution and quality of the Works.

"Site" means the territory, as defined in the SCC, allotted for the execution of the Works.

"Technical Specification" means the technical specifications of the Works included in the Contract, and any modifications of, or addenda to these specifications approved by the Procuring Entity.

"The Start Date" means the latest date, as given in the SCC, when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

"A Subcontractor" means an individual or legal entity, entering into a Contract with the Contractor to execute the part of the Works under the Contract, including the work of the Site.

"Temporary Structures" means the structures designed, constructed, installed and dismantled by the Contractor, and which are required for the execution of the Works.

"Modification" means a written instruction given by the Engineer to modify quantity of the Works, or items.

"The Works" means that the Contractor should construct, install, and hand over to the Procuring Entity under the Contract the execution of quantity of the Works, or completion of the Works, as defined in the SCC.

"Qualification Information" means the qualifications and experience of key personnel as defined in the Contractor's Bid Submission.

2. Contract Documents

- 2.1 Below listed documents shall constitute the Contract, and shall be its integral part, and shall be interpreted in the following order of priority:
- (a) Contract,
 - (b) Notice of Award,
 - (c) Contractor's Bid,
 - (d) Special Conditions of Contract,
 - (e) General Conditions of Contract,
 - (f) Technical Specifications,
 - (g) Drawings,
 - (h) priced Bill of Quantities, and priced Consumable Materials ; and,
 - (i) any other documents listed in *the Special Conditions of Contract* to be as a constituent part of the Contract.

3. Language and Law

- 3.1 The language of the Contract and the applicable laws governing the Contract are stated in the Special Conditions of the Contract.

4. Engineer

- 4.1 Except where otherwise specifically stated, the Engineer will decide contractual relationships between the Procuring Entity and the Contractor.

5. Official communication between the Procuring Entity and the Contractor

- 5.1 Official communication between the parties under the implementation of the Contract conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.

6. Entering into subcontract

- 6.1 The Contractor may enter into subcontracts with the approval of the Engineer, but may not assign the Contract without the approval of the Procuring Entity in writing. In case of entering into more than one Contract with subcontractors, the Contractor shall coordinate the activities of those subcontractors. Presence of subcontractors shall not alter the Contractor's liability for performance of the contract.

7. Personnel

- 7.1 The Contractor shall employ the personnel for key positions in order to perform the functions specified in the Qualification Information. The Engineer shall approve any proposed replacement of the key personnel only if their relevant qualifications and skills are the same or better than those of the personnel listed in the Qualification Information.

7.2 If for any reason the Engineer asks the Contractor to remove the person who is a staff member or employee of the Contractor or subcontractor, the Contractor should ensure that this person leaves the Site within three days, and no longer be engaged in the work under this Contract.

8. Procuring Entity's and Contractor's Risks

8.1 The Procuring Entity and the Contractor carry the risks which are the Procuring Entity's risks or the Contractor's risks under this Contract.

9. Procuring Entity's Risks

9.1 From the Start Date and until the Completion Date, or until the defects have been fully corrected, the following risks will be the Procuring Entity's risks:

(a) The risk of personal injury, or, death, or loss of or damage to property (exclusive of the Works, Plant, Materials, Machinery and Equipment) in consequence of:

- I. using or occupying the Site by the Procuring Entity for the execution of the Works, or for other purposes which may be an unavoidable result of the Works or
- II. negligence, improper fulfillment of official duties, or violation of legal rights of the Contractor by the Procuring Entity, or by any person employed by him, or under the Contract, exclusive of the Contractor.

(b) The risk of damage to the Works, Plant, Materials, and Machinery and Equipment to the extent that is due to a fault of the Employer, or in the Employer's design defect, or due to war or radioactive contamination directly affecting the country where the works are to be executed.

9.2 From the Completion Date and until the defects have been fully corrected, the risk of loss of or damage to the Works, Plant and Materials is the Procuring Entity's risk, exclusive of the cases when loss or damage caused by:

- (a) the defect which existed on the Completion Date;
- (b) the event which occurred before the Completion Date and which is related to the Procuring Entity's risks, or
- (c) the activities of the Contractor on the Site after the Completion Date.

10. Contractor's Risks

10.1 From the Start Date and until the defects have been corrected, the risk of personal injury, death, and loss of or damage to property (including the Works, Plant, Materials, Machinery and Equipment) which are not the Procuring Entity's risks are the Contractor's risks.

11. Contractor to Execute the Works

11.1 The Contractor shall construct and install the Plant in accordance with the Specifications, Drawings, Bill of Quantities and/or pursuant to the Defects Report.

12. The Works to Be Completed by the Completion Date

12.1 The Contractor may begin the execution of construction Works from the Start Date, and he should execute the Works in accordance with the Work Execution Schedule submitted by the Contractor and approved by the Engineer, and the Contractor must complete the construction Works by the Completion Date.

13. Construction of Temporary Structures

13.1 The Contractor shall submit to the Engineer the specifications and drawings indicating the expected construction of Temporary structures to be approved by the Engineer, provided that they comply with the Specifications and drawings.

13.2 The Contractor should, when required, co-ordinate the project of Temporary structures with the third party.

14. Accident Prevention

14.1 The Contractor shall be fully responsible for the safety of all activities on the Site.

15. Discoveries

15.1 Anything of historical or other interest or of significant value discovered on the Site shall be the property of the Procuring Entity. The Contractor should notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

16 Investigation and Use of Site

16.1 During the execution of the Works, the Contractor shall rely on the Site Investigation Reports, and may visit and investigate the Project Site. All information obtained by the Contractor during the Site visit, shall be used for the execution of the Works.

16.2 The Procuring Entity shall give the Contractor the right for using the whole Site which is allotted for project construction. If the right for using any part of the Site is not given by the date indicated in the Special Conditions of Contract, the Procuring Entity will be deemed to have delayed the start of the certain kinds of project Works. In this case the Procuring Entity should extend the construction period for the period of transferring the Site.

17. Access to the Site

17.1 The Contractor shall allow the Engineer and any other person authorized by the Engineer, access to the Site or to any other place where Work is being carried out or is expected to be carried out according to the Contract.

18. Orders and instructions

18.1 The Engineer, within his authority, may take a decision; give orders and instructions to be binding upon the Contractor.

18.2 If the Contractor assumes that decision taken by the Engineer exceeds the authority presented by the Engineer under the Contract, or decision was taken wrong, it shall be dealt with under clause 19.

19.0 Dispute Resolution

Any dispute between the Parties shall be initially discussed and, if possible, resolved by mutual agreement between the Parties. Should the Parties fail to resolve the dispute within ten (10) days of it arising, either party reserves the right to take further action. Dispute or disagreement arising between the Procuring Entity and the Contractor shall be settled in accordance with the Laws of Guyana.

19.1 Notwithstanding any references to dispute resolution herein, the parties shall continue to perform their obligations under the Contract, unless otherwise agreed.

B. Time Control

20. Work Execution Schedule

20.1 Within the time period specified in the Special Conditions of Contract, the Contractor shall submit to the Procuring Entity for approval the Work Execution Schedule where general methods of arrangement, procedure and period of execution of works on the Project construction are stated.

20.2 The Contractor shall submit, within the time periods specified in the Special Conditions of Contract to the Engineer for approval, the updated version of the Work Execution Schedule, taking into account the actual progress of performed works, and its impact on the time period of remaining works, including available changes in the sequence of execution of the works.

20.3 If the Contractor does not submit the updated Work Execution Schedule during the indicated period, the Engineer may retain the amount specified in the Special Conditions of Contract from the next Certificate of Performed Works, and continue to retain that amount until the delayed Work Execution Schedule is provided.

20.4 The Engineer's approval of the Work Execution Schedule shall not alter the Contractor's obligations. The Contractor may revise the Work Execution Schedule, and submit it to the Engineer again at any time. The revised Work Execution Schedule should demonstrate the effect of Modifications and Compensation Events.

21. Delays Ordered by the Engineer

21.1 The Engineer has a right to give order to the Contractor to suspend the start or progress of execution of the works on the Project construction. When any delay is ordered by the Engineer, the Completion Date shall be adjusted accordingly.

22. Early Warning

- 22.1 The Contractor shall inform the Engineer as soon as possible of likely specific events, or circumstances that may negatively affect the quality of the Works, increase the Contract Price or delay the execution of the Works on the Project construction. The Engineer may require the Contractor to assess the expected impact of the future event or circumstance on the Contract Price and Completion Date. The Contractor should provide such assessment within a short time.
- 22.2 The Contractor shall assist the Procuring Entity in preparing and analyzing proposals on how the consequence of such an event or circumstance can be avoided or reduced by anyone involved in the Work, and in carrying out any instruction of the Engineer resulting from those proposals.

C. Quality Control

23. Identifying Defects

- 23.1 The Engineer shall check the Works of the Contractor and notify the Contractor of the defects found. Such checking shall not involve the change in the Contractor's responsibilities. The Engineer is entitled to require the Contractor to search for a defect, and to uncover and check the results of Works that the Engineer considers may have a Defect.
- 23.2 The "Defects Liability Period" for the Works is as stated in the Special Conditions of Contract.

24. Tests

- 24.1 If the Engineer instructs the Contractor to carry out tests not provided for in the specifications to check whether the performed Work has a defect, and if as a result the test shows that it does, the Contractor shall pay for the test. If there is no defect, the payment for the test shall be done by the Procuring Entity and it shall be a Compensation Event.

25. Correction of Defects

- 25.1 The Engineer should notify the Contractor in writing of any defect before completion of the Defects Liability Period, which begins at Completion Date.
- 25.2 Upon receipt of each Notice of Defect, the Contractor should correct the indicated Defect within the time period specified in the Engineer's notice.

26 Uncorrected Defects

- 26.1 If the Contractor has not corrected the Defect within the time period specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, have the Defect corrected and the Contractor shall pay those costs.

D. Cost Control

27. Bill of Quantities

- 27.1 The Bill of Quantities includes the priced kinds of works and value of consumable material for the construction, installation, testing and commissioning of the Works to be executed by the Contractor.
- 27.2 The Bill of Quantities is used for calculation and payment for the Contract Price. The Contractor shall receive the payment for the executed amount of Works at the rate and price, and value of consumable materials indicated in the Bill of Quantities for each kind of work.

28. Changes in Quantities

- 28.1 In exceptional circumstances, the Procuring Entity, as may be industrially required, may change quantity of any Works, or individual kinds of Works.
- 28.2 At the request of the Procuring Entity, the Contractor within 7(seven) days of receipt of request should provide the Procuring Entity with a detailed breakdown of prices of change in the quantities indicating the rates for kinds of works and value of consumable material. The Procuring Entity shall evaluate those rates and value of consumable material in comparison with the Bill of Quantities provided by the Contractor under this Contract.
- 28.3 If during the comparison, the rate and value of consumable material will correspond with the rate and value of consumable material given in the Bill of Quantities, the Procuring Entity shall issue the Contractor a "Work order" for the execution of changed quantities.
- 28.4 If the rate and value of consumable material shall not correspond with the rate and value given in the Bill of Quantities, or if in the Procuring Entity's judgment, is unreasonable, the Engineer shall prepare a budget for changed quantities, or for individual kinds of Works, and on the basis of his own forecast, issues the Contractor a budget in the Work Order format to execute for changed quantities.
- 28.5 The Contractor does not have a right for additional payment as a compensation for expenditure.

29. Certificate of Performed Works

- 29.1 The Contractor shall monthly submit to the Engineer for payment the certificates of actually performed works prepared pursuant to the Bill of Quantities after deduction of aggregate payments of previously approved quantities.

- 29.2 The Engineer should check the Contractor's monthly certificates of performed works and approve them for payment to the Contractor.
- 29.3 The value of performed works should be determined by the Engineer, and should involve the value of all actually performed quantities in accordance with items of works, rates and value of consumable material under the Bill of Quantities.
- 29.4 The value of performed works should include the value of Work Orders (additional works) and of Compensation Event.
- 29.5 The Engineer may exclude, based on subsequent circumstance, any items certified in a previous certificate of performed works for payment, or reduce the proportion of any item previously certified in any certificate of performed works for payment in the light of later information received after approval and payment.

30. Payments

- 30.1 Payments shall be adjusted for deductions for advance payments and retention. The Procuring Entity shall pay the Contractor sums according to the certificates of performed works confirmed by the Engineer within 28 days after the date of invoicing pursuant to the certificate of performed works. In case when the payment is delayed, the Procuring Entity shall pay interest to the Contractor indicated in the Special Conditions of Contract against the delayed payments.
- 30.2 The kinds of Works for which no rate or price, and value of consumable material is entered in will not be paid for by the Procuring Entity, and shall be deemed included in other kinds of Works.

31. Retention

- 33.1 For the purposes of correction of possible defects, the Procuring Entity shall retain from each payment a portion of the funds in the sum of 10 % of the Invoice sum.
- 33.2 On the Completion Date half of the whole retention shall be returned to the Contractor and the second half shall be returned after completion of the Defects Liability Period, provided that all Defects indicated in the notice and certified by the Engineer have been corrected.

32. Liquidated Damages.

- 32.1 In case of a failure by the Contractor to meet the Completion Date in keeping with the Expected Period of Completion, the Contractor shall pay the Procuring Entity liquidated damages specified in the Special Conditions of Contract for each date of delay of the actual Completion Date against the Expected Period of Completion. The total amount of liquidated damages shall not exceed the amount specified in the Special Conditions

of Contract. The Procuring Entity may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities. Thereafter the procuring entity has the right to terminate the contract and demand all forms of damages.

- 32.2 In case of extension of the Expected Period of Completion after liquidated damages have been paid, the Engineer shall repay the overpaid amount of liquidated damages by the Contractor at the expense of next certificate of performed works.

33. Force majeure

- 33.1 The Contractor shall not forfeit his performance security, and shall not be responsible for payment of liquidated damages, or be subjected to termination of this Contract, if the delay in execution of the Contract, or default is the result of an event of force majeure.

- 33.2 For the purposes of this Clause, "force majeure" means an event beyond the control of the Contractor, not connected with the fault, error or negligence of the Contractor, and not foreseeable. Such events may include but not restricted to such actions as: wars or revolutions, fires, floods, epidemics, quarantine and embargo affecting the execution of the Works.

- 33.3 When an event of force majeure arises, the Contractor shall promptly notify the Engineer in writing of such event and its cause. If no written instructions received from the Engineer, the Contractor shall continue to perform his obligations under the Contract as far as possible, and shall search for alternative ways of execution of the Contract, irrespective of force majeure.

- 33.4 If the event of force majeure prevents performance of the obligations by the Contractor in whole or material part for a continuous period of more than fifteen (15) days commencing from the date of a notice submitted under this Clause, the Procuring Entity may terminate this Contract by written notice to the Contractor. The Procuring Entity may terminate the Contract after fifteen (15) days following the date of the notice of an event of force majeure.

34. Mobilization or Advance Payment

- 34.1 The Procuring Entity shall make mobilization or advance payment to the Contractor in the amount and within the dates specified in the Special Conditions of Contract, provided that a Bank Guarantee for the amount of advance payment has been provided by the Contractor. The Guarantee shall remain in force until the full repayment of advance; in this case the amount of the Guarantee should be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on advance payments.

34.2 The Contractor shall use the advance payment exclusively to pay for Plant, Machinery, Equipment, Materials and other expenses required directly for the execution of the Contract. The Contractor shall demonstrate that advance payment has been used for the purposes of execution of the Contract by supplying copies of invoices or other documents.

34.3 The advance payment shall be repaid by deducting proportionate amounts from the Certificate of performed works that are due to the Contractor. No account shall be taken of the advance payment or its repayment in assessing valuations of performed works, Modifications, Compensation Events, Bonuses or Liquidated Damages.

35. Performance Security

35.1 Within seven (7) days upon receipt of notice of award, the Contractor shall furnish the Procuring Entity with the Performance Security, the amount and form of which is specified in the Special Conditions of Contract.

35.2 The Performance Security shall be returned by the Procuring Entity not later than fifteen (15) days after the Completion Date by the Contractor of his obligations under this Contract, including all guarantee obligations.

36. Cost of Repairs

36.1 Cost of repairs for loss of or damage to the Works, Plant, or Materials included in Works and having occurred between the Start Date and the Completion Date, including the Defects Liability Period shall be reimbursed by the Contractor at the Contractor's cost if that loss or damage arose as a result of the Contractor's action or inaction.

E. Finishing the Contract

37. Completion

37.1 The Contractor, after completion of all works, shall send the Procuring Entity a notice of Completion and shall request the Engineer to issue a certificate of Completion of the Works.

38 Taking Over

38.1 The Procuring Entity not later than seven (7) days after the Contractor's notice, shall take over the Site and Works. A Certificate of Completion and a List of Defects shall be prepared with participation of the Contractor. The date of approval of the Certificate of Completion by the Procuring Entity shall be deemed the Completion Date.

39. Final Account

39.1 After the Certificate of Corrected Defects by the Engineer, the Contractor shall supply the Procuring Entity with a final account for the remaining amount that the Contractor considers payable under the Contract. Provided that all defects are corrected, and that

the supplied invoice is correct and complete, the Engineer, within one month, shall certify the final Certificate of Performed Works. If during the inspection, defects are found, or the supplied invoice is incorrect or inaccurate, the Engineer, within one month, shall submit a schedule for correction of defects. If the Final Account is still incorrect or inaccurate after it has been resubmitted, the Engineer shall determine independently the amount due to and shall decide to pay that amount to the Contractor.

40. Termination

40.1 The Procuring Entity or the Contractor may terminate the Contract if the other party causes a fundamental breach of the conditions stipulated in this Contract.

40.2 Fundamental breaches of the Contract conditions shall include, but shall not be limited to, the following:

- (a) the Contractor stops the works for 30 days, where such stoppage is not provided in the current Work Execution Schedule and is not authorized by the Engineer;
- (b) The Procuring Entity instructs the Contractor to suspend the progress of the works, and such instruction is not canceled during the days specified in the Special Conditions of Contract;
- (c) The Procuring Entity or the Contractor becomes bankrupt or goes into liquidation, exclusive of reorganization or amalgamation;
- (d) The Procuring Entity does not pay the Contractor the amount confirmed by the Engineer within the days specified the Special Conditions of Contract of the date of invoice submitted to the Contractor for payment;
- (e) the Engineer notifies and warns that non-correction of a specific defect is a fundamental breach of the Contract conditions; and the Contractor does not correct a defect within acceptable period of time established by the Engineer;
- (f) The Contractor does not provide or fails to maintain the required guarantee or security;
- (g) The Contractor delayed the completion of the Works for a number of days correspondent to a maximum possible amount of liquidated damages as indicated in the Special Conditions of Contract.
- (h) If the Contractor, in the Procuring Entity's judgment, has engaged in corrupt or fraudulent practices in the process of competitive selection or execution of the Contract.

For the purposes of this subparagraph:

- (1) "**corrupt practice**" means the offering, giving, the agreement requesting for remuneration in any form, or services rendering in order to influence the action of a public official in the procurement process or contract execution; and
- (2) "**fraudulent practice**" means a misrepresentation of facts in order to influence the procurement process or execution of a contract to the detriment of the Procuring Entity; including a collusive practice of bidders

(prior to or after bid submission) to establish bid prices artificially at non-competitive level, and deprive the Procuring Entity from benefits of free and open competition;

(3) **“collusive practice”** means a scheme or arrangement between two or more contractors (subcontractors), with or without the knowledge of the Procuring Entity, designed to artificially rise the price in during the execution of a contract;

(4) **“coercive practice”** means harming or threatening to harm (directly or indirectly), persons or their property to influence their participation in the execution of a contract;

40.3 When either party of the Contract notifies the Engineer of breach for a cause other than those listed under Clause 40.2 above, the Engineer shall determine whether the breach is fundamental or not.

40.4 This Contract may be terminated in accordance with clause 33.4 above.

Notwithstanding the above, the Employer may terminate the Contract for convenience.

40.5 If the Contract is terminated, the Contractor shall stop the Works immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

41. Payment upon Termination

41.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue the confirmed Certificate of the Performed Works and Materials ordered, less advance payments received up to the date of the confirmation of the certificate and less the percentage of unperformed works. Additional Liquidated Damages shall not be charged. If the total amount due to the Procuring Entity exceeds the amount due to the Contractor, the difference shall be a debt of the Contractor to the Procuring Entity.

41.2 If the Contract is terminated for the Procuring Entity’s convenience or because of a fundamental breach of Contract by the Procuring Entity, the Engineer shall confirm the Certificate of the performed works, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, less advance payments received up to the date of the confirmation of the certificate.

42. Property

42.1 All Materials on the Site, Equipment, Temporary Structures, and Works shall be deemed the property of the Procuring Entity if the Contract is terminated because of the Contractor's fault.

43. Release from Performance

43.1 If the Contract is frustrated by an event of force majeure the Engineer shall certify the impossibility of the Contract performance. The Contractor shall make the Site safe and stop work as quickly as possible after receiving such notice, and shall be paid for all work carried out before receiving an instruction, and for any work carried out afterwards to which a commitment was made.

44. Contractor to Protect Works Done, Materials and Plant

44.1 The Contractor should provide the protection for performed Works and all Materials, Plant, resources and other items related to the Works from any or all kinds of damage, deterioration, destruction linked to rain, fire, robbery, mysterious disappearance and other reasons. The Contractor during the execution of the works, shall additionally ensure the protection of other Works on Project Site, and of property belonged to the Procuring Entity including related structures from any damage, deterioration or for any other reason, including (but not limited to these) roads, buildings, warehouses and other kinds of movable and immovable property, exclusive of the event of force majeure. All costs incurred by the Contractor in view of the above-stated, shall not be subject to additional payment on the part of the Procuring Entity.

44.2 The Procuring Entity will not be responsible for any damage to the Contractor's works before they are fully completed and accepted, and the Contractor shall, without additional payment, carry out all corrections, repairs or replacements as applicable to the Works to correct any defect or damage.

45. Materials and Equipment of Contractor

45.1 The Contractor shall be responsible for the arrangement of supply, transportation, discharge and storage of all Materials and Equipment to be supplied, and delivered by the Contractor to the Project Site. The Procuring Entity shall in no case be responsible for expenses related to the supply, transportation, processing, storage of any Material or Equipment. No supplies shall be addressed to the Procuring Entity.

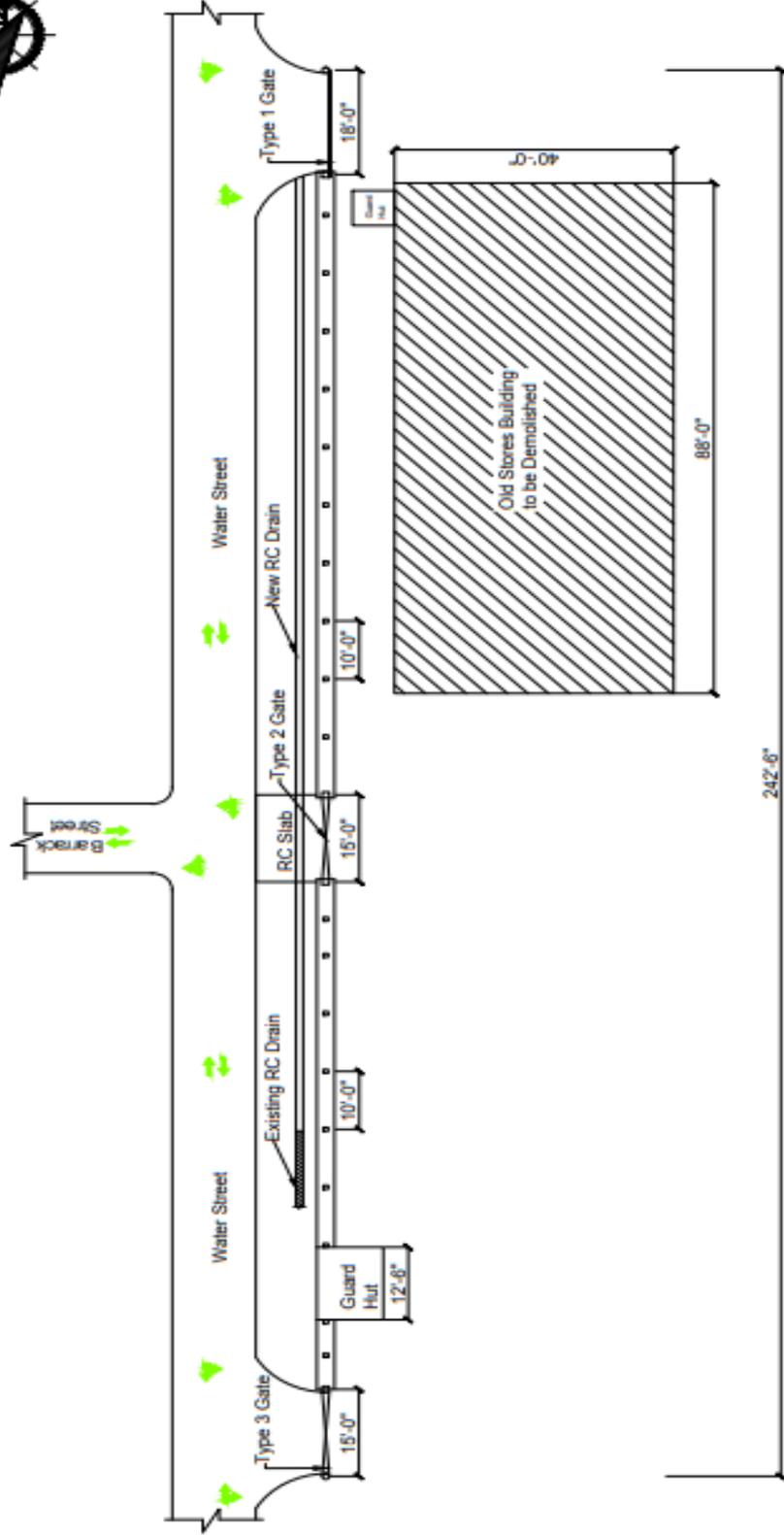
45.2 The Contractor shall provide the Procuring Entity with a Schedule of Receipt of Materials and Equipment on the Project Site. Only the sites permitted by the Procuring Entity may be used for storage, stowage and stockpiling.

Special Conditions of Contract (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict between the provisions herein and the General conditions of Contract, the Special Conditions of Contract shall prevail.

GCC Clause name	Special Conditions of Contract
1.1	<p>The Procuring Entity is Guyana Power and Light, Inc. of 40 Main Street Georgetown Guyana</p> <p>The Contractor is: Not Applicable</p> <hr/> <p><i>The Engineer is: Renick Marslow - Engineer, 257-259 Middle Street, Cummingsburg, Georgetown, Tel# 227 4604 or 608-8658 and e-mail rmarslow@gplinc.com</i></p>
1.1	The Intended Completion Date for the whole of the Works shall be Six (6) Months.
1.1 and 23.2	The Defects Liability Period is Six (6) Months.
1.1	The Start Date shall be within 14 days after the award and signing of contract.
3.1	The Language of Contract is English
3.1	The Applicable Law: is the Laws of Guyana
16.2 and 33.1 (a)	The date by which the Site has been transmitted to Contractor for use Within 14 days of the signing of the contract
19.1	Disputes arising out of or in connection with the Contract shall be settled in accordance with the Laws of Guyana.
20.1	The period of submission of Work Execution Schedule 7 days after signing of the contract
20.2	The period of submission of updated Work Execution Schedule 7 days after the engineer's request
20.3	The retention for untimely submission of Work Execution Schedule is \$50,000.
30.1	The interest to be paid for the delay of payment on the amount of the delayed

	payment N/A
31.1	Retention The percentage of payments due to be retained of the value of works done to correct possible defect is <i>10%</i>)
32.1	Liquidated Damages The penalty to be paid by the Contractor for delay of the completion of works <i>0.5% per week of the bid price, but not more than 10% of Contract Price).</i>
33.1 (b)	N/A
34	Mobilization/ Advance Payment The mobilization/advance payment to be provided is 30% of the Contract Sum
35.1	A Performance Security is required in the amount of 10% of the Contact Price and may be in the form of a bank guarantee, cheque or cash.
35.2	N/A
40.2(b)	When a suspension order is not revoked by the Employer after 30 days.
40.2(d)	When payment to the Contractor is delayed beyond 60 days following invoicing
40.2(g)	The maximum number of days of delay is: 20 weeks



Site Plan for Eastern Side Fence

Project: Rehabilitation of Perimeter Fences, Guard Hut and Demolition of Building at Kingston, Georgetown

Drawn For: GPL Inc.

Scale: $\frac{3}{16}" = 1' 0"$

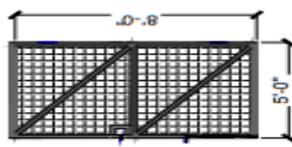
Drawn By: R. Manslow

Date: 2021-02-18

Drawing No: 1-3

Checked By: F. Haynes

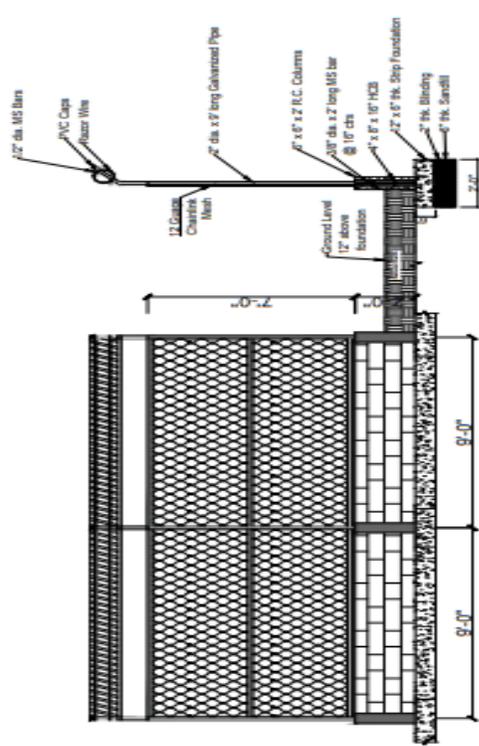
GUYANA POWER & LIGHT INC.



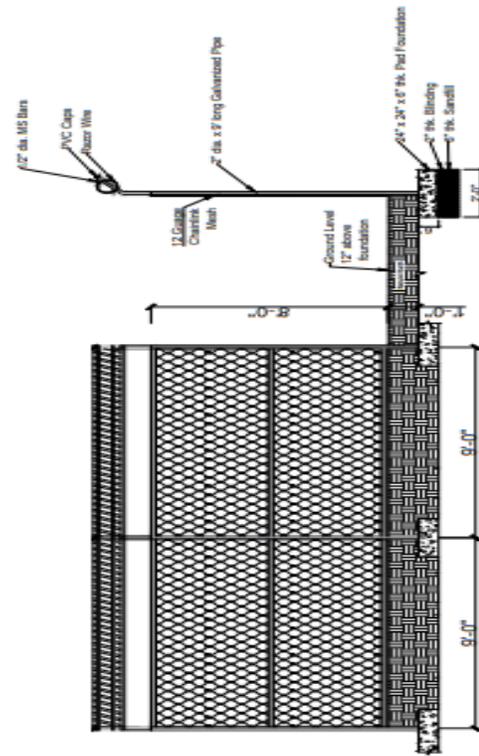
Small Gate



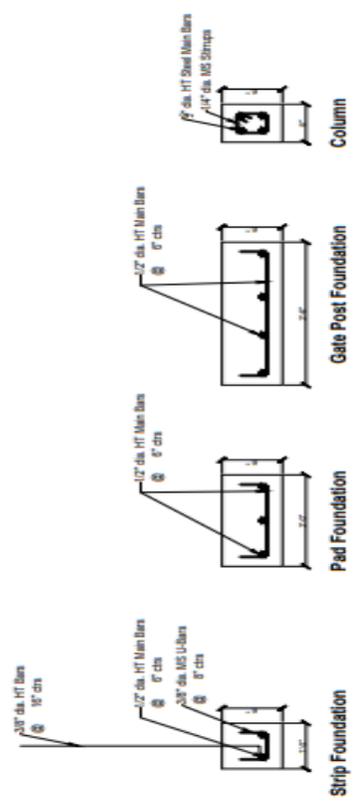
Metal Sliding Gate



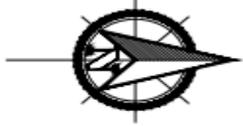
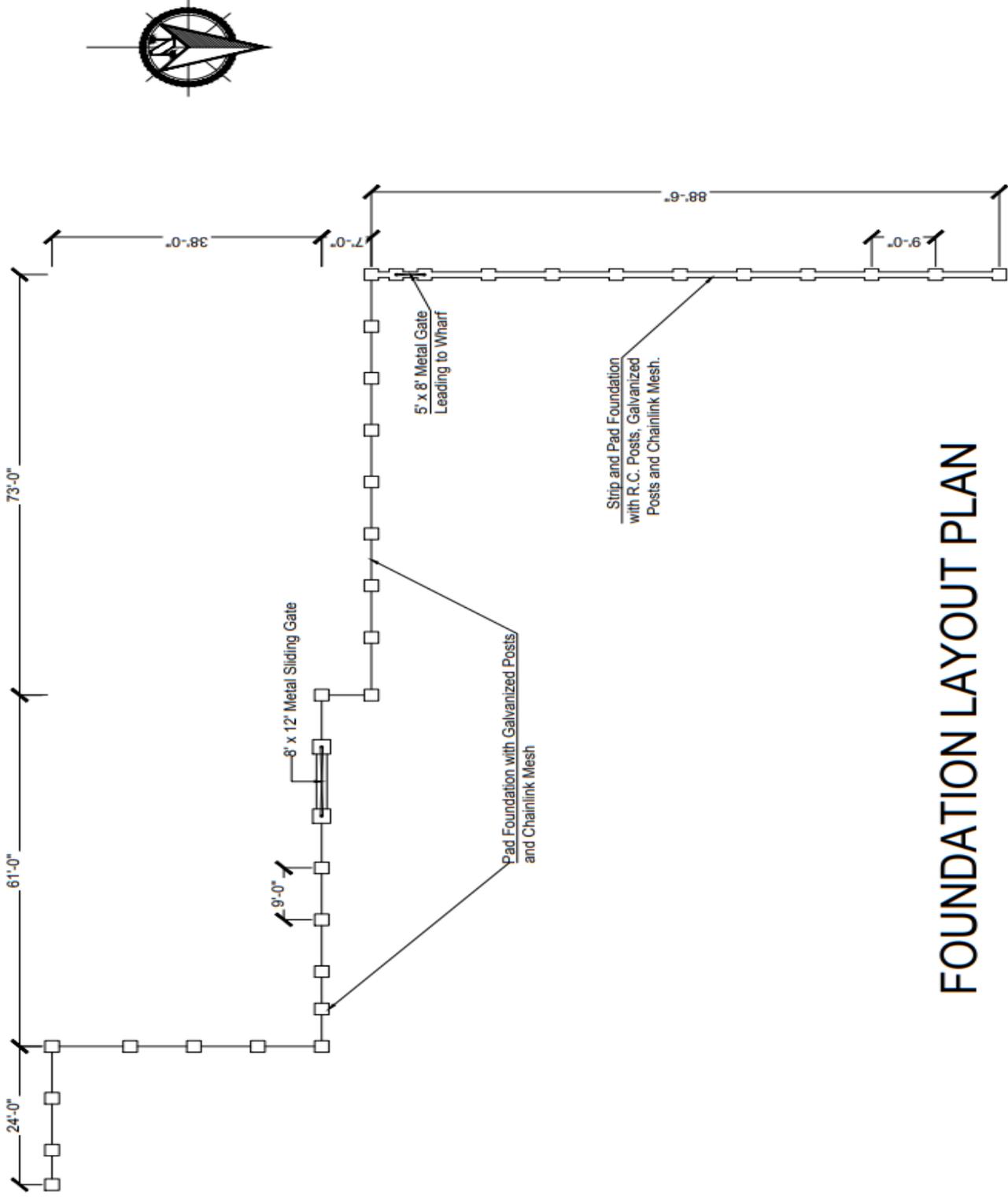
Western Fence Details



Southern Fence Details



Reinforcement Details



FOUNDATION LAYOUT PLAN

Project: Rehabilitation of Perimeter Fence & Hard Pad at I.S.P.S. Area at Kingston, Georgetown

Drawn For: GPL Inc.

Scale: $\frac{1}{16}'' = 1' 0''$

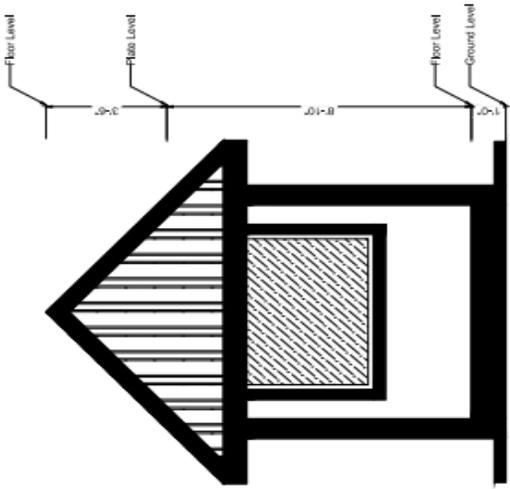
Drawing No: 2-3

GUYANA POWER & LIGHT INC.

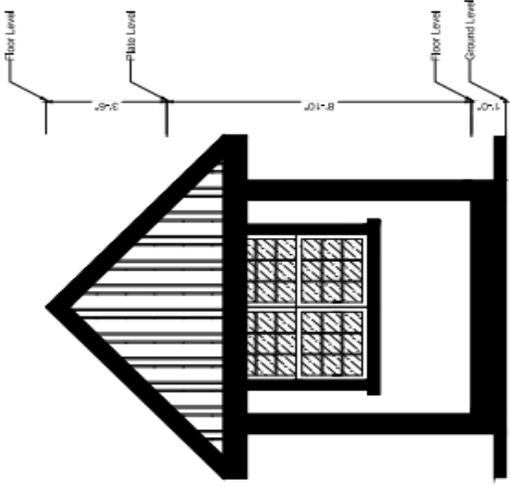
Drawn By: R. Marslow

Date: 2021-02-22

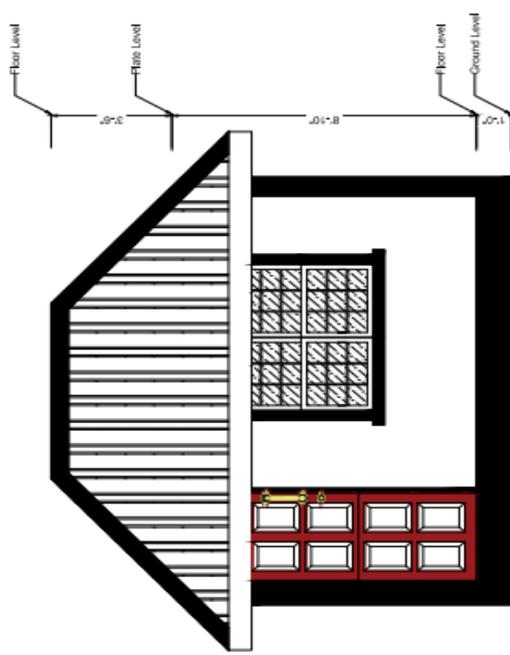
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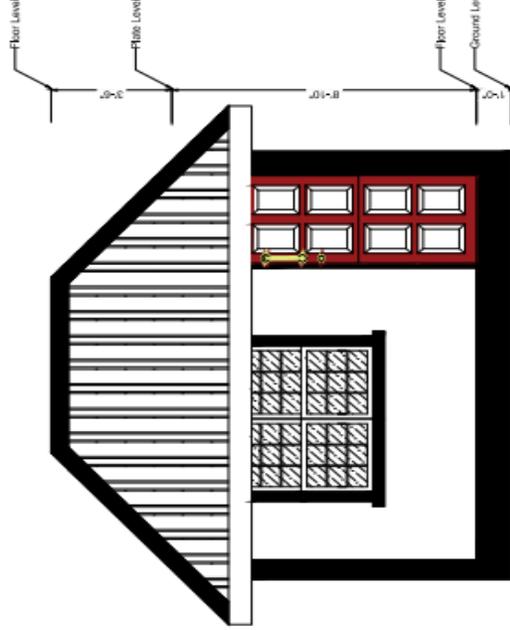
Northern Elevation



Southern Elevation



Western Elevation



Eastern Elevation

Construction of Security Hut to Main Entrance to I.S.P. Area at Kingston, Georgetown

Drawn By: R. Marslow

Scale: 1/4" = 1' 0"

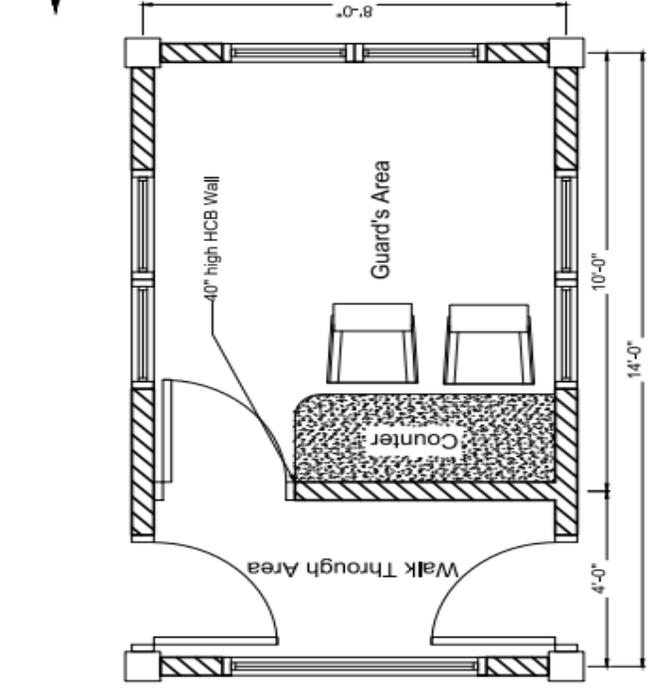
Drawing No: 1-2

GUYANA POWER AND LIGHT
INC.

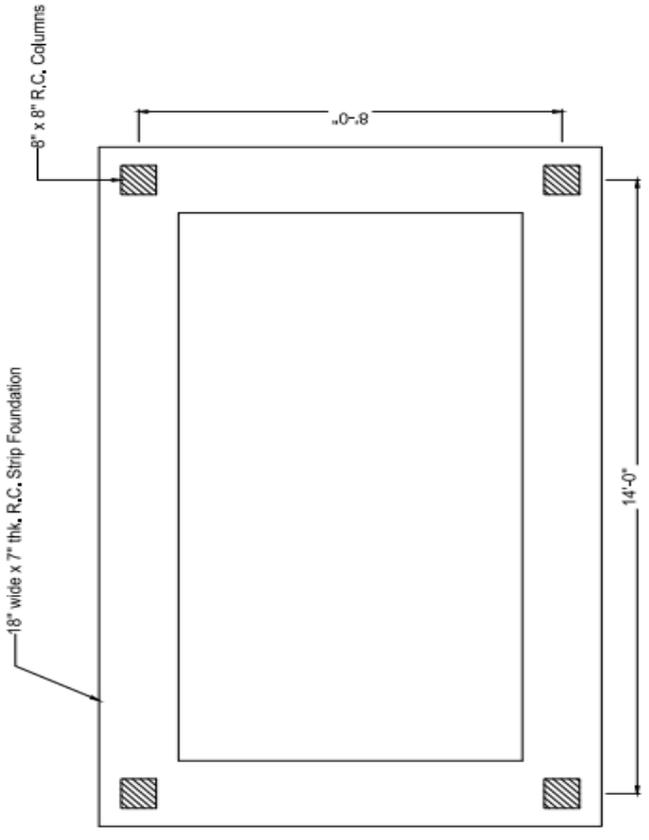
Drawn For: GPL Inc.

Date: 2020-10-28

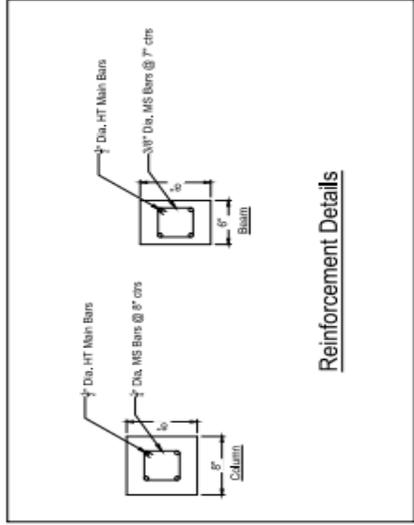
Checked By: C. Sobers



Plan of Guard Hut



Foundation Layout



Reinforcement Details

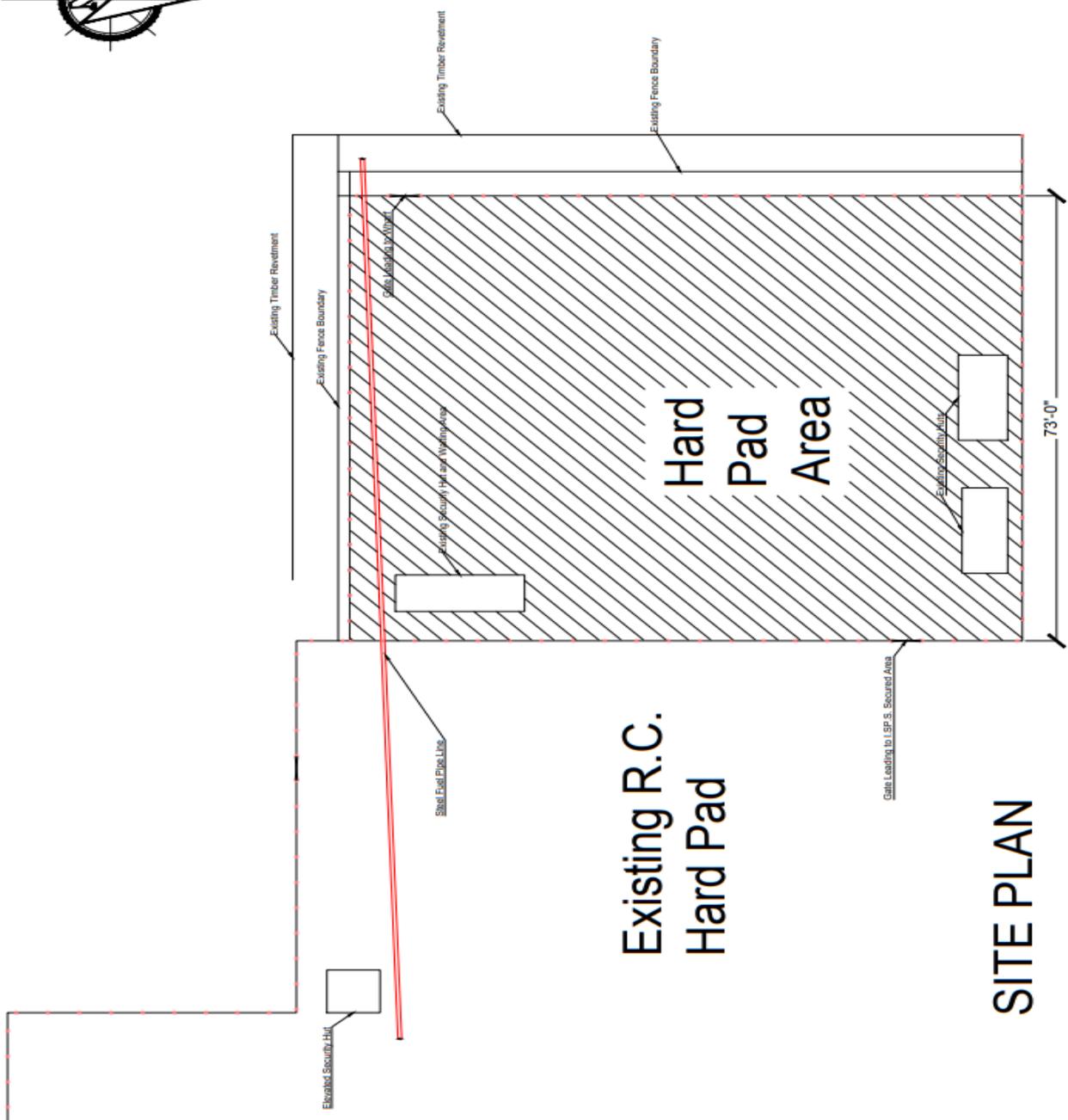
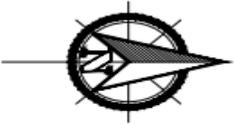
Construction of Security Hut to Main Entrance to I.S.P.S. Area at Kingston, Georgetown

Drawn By: R. Marslow
 Drawn For: GPL Inc.

Scale: 3/8" = 1' 0"
 Date: 2020-10-28

Drawing No: 2-2
 Checked By: C. Sobers

GUYANA POWER AND LIGHT
 INC.



Existing R.C.
Hard Pad

Hard
Pad
Area

SITE PLAN

Project: Rehabilitation of Perimeter Fence & Hard Pad at I.S.P.S. Area at Kingston, Georgetown

Drawn For: GPL Inc.

Scale: $\frac{1}{16}'' = 1' 0''$

Drawing No: 1-3

GUYANA POWER & LIGHT INC.

Drawn By: R. Marslow

Date: 2021-02-22

Checked By: F. Haynes

BILL OF QUANTITIES



CLIENT:
PROJECT:

GUYANA POWER AND LIGHT INC
REHABILITATION OF PERIMETER FENCES, GUARD
HUT AND DEMOLITION OF BUILDING AT KINGSTON
POWER STATION COMPOUND, KINGSTON,
GEORGETOWN

BILL No.: 1
PRELIMINARIES

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>General Note</u>	-			
	<i>a.</i>	<i>The site of the proposed works is located at GPL Power Station Compound, Kingston, Georgetown</i>			
	<i>b.</i>	<i>The works consist of the following works: 1. Demolition of the existing chainlink and angle iron post fence and construct new fence, gates and concrete drains. 2. Demolition of old stores building. 3. Demolition of old timber guard hut and construct new concrete guard hut. 4. Construct new fence at I.S.P.S. area including hard pad area.</i>			
	<u>Preliminaries</u>				
1.1	Provide the means of access to site and mobilize equipment and personnel and demobilize same at the completion of works.	Sum	...	...
1.2	Provide storage and workshop facilities	Sum	...	...
1.3	Allow for the cost of a Performance Bond (10% of Contract Sum to cover both construction and defects liability period)	Sum	...	...
1.3	Allow for Mobilization Advance Bond if required (30% of contract sum)	Sum	...	...
1.4	Provide all scaffolding necessary for the works	Sum	...	...

1.5	Allow for all necessary safety signs, safety tapes, barricades etc. to be used during the contract period, same must be removed after project is completed.	Sum	...	...
1.6	Allow for the removal of construction debris from site as same is accumulated, provision to be made for transporting debris from compound to a dumpsite.	Sum	...	...
BILL No. 1 - TO BILL SUMMARY					

BILL No.: 2 Demolition Works

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>General Note</u>	-			
	<i>All rates must include for transportation, materials, labor, scaffolding, machinery, equipment, taxes, overheads & profits.</i>				
	-				
2.1	Provide for the demolishing of the defective chainlink fence to the eastern side of the compound and disposed of all material in an approved area. Allow for all surrounding structures to be protected and transportation to cartaway debris.	Ln.ft	182		
2.2	Provide for breaking of the existing apron of old stores building to accomodate foundation for fence. Allow for using a jackhammer or concrete cutter to cut reinforced concrete apron. Rate to cater for transportation to cartaway debris.	Ln.ft	88		
2.3	Provide for the removal of existing metal gates. Sizes of gates are as follows: 18' wide x 8' high and 15' wide x 8' high	Nr	2		
2.4	Provide for the demolition of defective 6' x 6' timber hut, since the new hut would be built on the same portion of land. Rate must include for transportation for removal all construction waste and old timber members from site.	Sum	...	...
BILL No. 2 - TO BILL SUMMARY					

BILL No.: 3 EASTERN PERIMETER FENCE WORK

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>General Note</u>				
	<i>All rates must include for transportation, materials, labor, scaffolding, machinery, equipment, taxes, overheads & profits.</i>				
	<u>Length of Fence - 182' - 0" (without gates)</u>				
	<u>Excavation</u>				
3.1	<i>Provide for the excavation of foundation trench for Pad & Strip Foundation. Minimum depth of 24".</i>				
	a. Strip Foundation - 2'-6" wide	Cu Yd	42		
3.2	Provide for leveling of excavated trench bottom & proof roll to make good.	Sq Yd	51		
3.3	Provide, place and compact (100% Proctor Density) white sand, 6" thk	Cu Yd	9.4		
3.4	Provide for mixing (mechanically) & placing 1:6 cement/w/sand blinding, compact to 2" thk	Sq Yd	51		
	<u>Form Work</u>				
3.5	<i>Provide for construct, place & fix water tight form work allow for all braces, straps, supports etc and striking of form.</i>				
	a. Strip Foundation (rod/tamp finish)	Sq Yd	27		
	b. Column with 1" chamfer edge (fair-faced finish)	Sq Yd	67		
	<u>Reinforcement</u>				
3.6	<i>Provide for cut, bend, tie (18 gauge wire) and place H.T rebar, allow for steel coverage as shown in drawings [2" min.], spacer blocks and chairs. [lap length 40xd & anchorage length 45d]. All reinforcement must be free from all defects and foreign materials.</i>				
	a. Strip Foundation "U" Bar @ 8" ctrs 1/2" dia HT bars	Lbs	490		

	b.	Strip Foundation (Main bar x 4 nr.) 1/2" di. @ 8" ctrs	Lbs	545		
	TOTAL CARRIED FORWARD					

	TOTAL BOUGHT FORWARD					
	<u>Reinforcement</u> . Continue...					
	c.	Columns (stirrups) 1/4" dia. MS @ 8" ctrs 13 nos/column	Lbs	140		
	d.	Columns 1/2" dia HT bars - 4 nos/columns	Lbs	585		
	e.	Starter bars for HCB wall 1/2" dia HT bars x 4' long @ 16" ctrs	Lbs	336		
	<u>Concrete Works</u>	-				
3.7	<i>Supply and place 3500 psi [28 days strength] concrete, allow for concrete to be vibrate, level etc. concrete mixing and pouring must follow standard practice.</i>					
	a.	Strip Foundations (182' long x 2' 6" wide x 8" thk.)	Cu Yd	12		
	b.	Columns (fair-faced finish)(8" x 8" x 9')(19 nr)	Cu Yd	3		
	c.	Columns (fair-faced finish)(12" x 12" x 9')(4 nr)	Cu Yd	1.4		
	<u>4" x 8" x 16" HCB Blocks</u>					
3.8	Supply and place (stretcher bond) Hollow Core Block [800 psi minimum] for walls with a 1/2" thk mortar [1:3 mortar] joints to all sides. Block works to be maintain line and level as shown in drawing. Allow for first three (3) rows of blocks to be reinforced with 1/2" dia. x 4' long HT bars @ 16" ctrs and in-fill with 3,500 psi concrete		Sq Yd	168		
	<u>Rendering</u>					
3.9	Provide for mixing 1:3 mortar mix for plaster to walls [both faces] at 1/2" thk. sponge finished.		Sq Yd	336		
	<u>Return Fill</u>	-				

3.10	Provide for the return fill of selected excavated material, place and compact same to both side of wall and compaction.	Cu Yd	12		
	TOTAL CARRIED FORWARD				

	TOTAL BOUGHT FORWARD				
	<u>Security - Razor Wire</u>				
3.11	Provide for supply & fix in position 2" diameter, galvanized pipe embedded 12" into RC columns fix with crabs, project 6" above wall & 14" long 45 degree bend, allow for PVC caps to ends. As shown in drawings	Nos	23		
3.12	Provide for supply & fix 5/8" dia MS steel rods for razor wire support.	Ln Ft	384		
3.13	Provide for supply & fix in position, coated stainless steel razor wire, around 5/8" dia. support, allow for 8" max. spacing between wraps	Ln ft	182		
	<u>Painting</u>				
3.14	<i>Provide for cleaning of masonry walls & columns of all loose materials, dirt & the likes, prepare wall for painting as follows;</i>				
	a.	Concrete Primer - 1 coat	Sq Yd	364	
	b.	Concrete Paint - 2 coats	Sq Yd	364	
3.15	<i>Provide for cleaning of all metal components of the security - razor wire assemble of all rust, oil, dirt & the likes, prepare for the following;</i>				
	a.	Galv. Pipe & Angle - 1 coat etch primer	Ln Ft	40	
	b.	Galv. Pipe & Angle -2 coats anti-corrosive paint.	Ln Ft	40	
	c.	Galv. Pipe & Angle - extra coat at all welds	Sum	...	...
	d.	MS rods - 3 coat anti- corrosive paint	Ln Ft	384	
	TOTAL CARRIED FORWARD				

	<u>TOTAL BROUGHT FORWARD</u>					
	<u>GATE WORKS</u>					
	<u>METAL GATE - TYPE - 1 - SOUTHERN END</u>					
	-					
3.16	Provide for the fabrication of a sliding metal gate from 2" x 2" square Galvanized pipe frame, with a small gate to allow for entrance and exit without opening main gate. As shown in drawings					
	a.	Main Gate - 8'-0" high x 18'-0" wide	Sum	...	...
	b.	Small Gate - 8'-0" high x 3'-0" wide	Sum	...	...
3.17	Provide for the fabrication of U-shaped metal brackets to top of gate using 1/2" thk. Metal plate to hold sliding gate in upright position parallel to the R.C. gate posts.					
			Nos	2		
3.18	Provide for a 1/2" thk MS flats 2" wide x 6" long fitted with crabs to be embedded into RC Columns to received U-shaped metal brackets					
			Nos	2		
3.19	Supply an install electric gate motor with the following specifications/similar: 230V/120V, 550W, 1400 RPM, 27 Nm Torque, ≥ 1500 LBS capacity, remote controlled, etc. Rate must include for all necessary works to make same functional.					
			No	1		
3.20	Supply and install metal sliding rack, same will be secured to R.C. surface to the bottom of gate.					
			Ln.ft	37		
3.21	Supply and install 78mm dia. X 32mm thk. Recessed gate track wheel, same must be secured to the bottom frame of the sliding gate.					
			No	2		
	<u>TOTAL CARRIED FORWARD</u>					

	<u>TOTAL BROUGHT FORWARD</u>					
	<u>METAL GATES- TYPE - 2 - MIDDLE</u>					

3.22	Provide for the fabrication of a metal gate from 2" Galvanized pipe frame, with a diagonal support, in 2 sections. As shown drawings					
	a.	Section - 1 - 8'-0" high x 7'-6" wide	Sum	...	...
	b.	Section - 2 - 8'-0" high x 7'-6" wide	Sum	...	...
3.23	Provide for the fabrication of metal hinge using 3/4" dia black steel pipe 12" long, cut in sections of 3", 6", 3".with the 6" section welded to a 1/2" MS steel plate 1" depth & the 3" sections (top & bottom) welded to the gate.		Nos	4		
3.24	Provide for a 1/2" thk MS flats 2" wide x 6" long fitted with crabs to be embedded into RC Columns to received gate hinges. As shown in drawings		Nos	4		
3.25	Provide for the fabrication of 3/4" dia MS rod 3'-0" long vertical bolt/pin to secure gate, with 3/4" dia black steel pipe 4" long with latch & eye for padlock, secure to gate as shown in drawings.		Nos	1		
3.26	Provide for the fabrication of 3/4" dia MS rod 1'-0" long vertical bolt/pin to secure gate, with 3/4" dia black steel pipe 4" long with latch & eye for padlock, secure to gate as shown in drawings.		No	1		
3.27	Provide for cast-in position 1/2" thk x 1 1/2" wide MS flats, with 1" dia hole to receive bolt/pin, project 1" above concrete slab. As shown in drawings		No	1		
TOTAL CARRIED FORWARD						

TOTAL BROUGHT FORWARD						
<u>METAL GATE - TYPE - 3 - NORTHERN END</u>						
-						
3.28	Provide for the fabrication of a metal gate from 2" Galvanized pipe frame, with a diagonal support, in 3 sections. As shown in drawings					
	a.	Section - 1 - 8'-0" high x 7'-6" wide	Sum	...	...
	b.	Section - 2 - 8'-0" high x 3'-2" wide	Sum	...	...
	c.	Section - 3 - 8'-0" high x 4'-4" wide	Sum	...	...

3.29	Provide for the fabrication of metal hinge using 3/4" dia black steel pipe 12" long, cut in sections of 3", 6", 3".with the 6" section welded to a 1/2" MS steel plate 1" depth & the 3" sections (top & bottom) welded to the gate.	Nos	6		
3.30	Provide for a 1/2" thk MS flats 2" wide x 6" long fitted with crabs to be embedded into RC Columns to received gate hinges. As shown in drawings	Nos	4		
3.31	Provide for the fabrication of 3/4" dia MS rod 3'-0" long vertical bolt/pin to secure gate, with 3/4" dia black steel pipe 4" long with latch & eye for padlock, secure to gate as shown in drawings.	Nos	2		
3.32	Provide for the fabrication of 3/4" dia MS rod 1'-0" long vertical bolt/pin to secure gate, with 3/4" dia black steel pipe 4" long with latch & eye for padlock, secure to gate as shown in drawings.	No	1		
3.33	Provide for cast-in position 1/2" thk x 1 1/2" wide MS flats, with 1" dia hole to receive bolt/pin, project 1" above concrete slab. As shown in drawings	No	2		
	TOTAL CARRIED FORWARD				

	TOTAL BROUGHT FORWARD				
	<u>PAINING OF GATES</u>				
3.34	Provide for the application of one (1) nr. Prime coat and two (2) nr. Finishing coats of anti-corrosive paint to all three 3) nr. Gates.	Sum	...	...
	<u>DRAIN WORKS</u>				
	<u>External RC Drain- 165'-0"</u>				
3.35	Provide for excavating for RC drain 2' 4" wide x 24" arv. depth. Disposed of excavated materials	Cu Yd	30		

3.36	Provide for leveling of excavated trench bottom & proof roll to make good.	Sq Yd	43		
3.37	Provide for sand filling & compaction to excavated trench, 6" thk	Cu Yd	8		
3.38	Provide for sand filling & compaction to area between drain and fence, 6" thk	Cu Yd	25		
3.39	Provide for blinding of drain bottom, 2" thk sand/cement (1:8 mix) blinding, place & compact.	Sq Yd	43		
3.40	Provide for water tight form work, allow for all straps & braces etc, (av. depth 16")	Sq Yd	86		
3.41	Provide and place reinforcement to drain, allow for 40d laps and 2" coverage from outer face.				
TOTAL CARRIED FORWARD					

TOTAL BROUGHT FORWARD					
	a	3/8" dia HT rebar "U" @ 8" ctrs (as shown in drawings)	Lbs	235	
	b	3/8" dia HT rebar - main bar@ 8" ctrs (4 nr rows)	Lbs	270	
	c	3/8" dia HT rebar for walls @ 6" ctrs, both directions	Lbs	552	
3.42	Supply and place 3500 psi (28 days) concrete to drain, allow for compaction/vibrating concrete.				
	a	Drain Walls 4" Thk	Cu Yd	4.2	
	b	Drain Bottom 4" Thk	Cu Yd	5	
3.43	Provide for return fill and compact to drain wall top on both side of RC Drain		Cu Yd	15	
3.44	Supply, place, grade, shape and compact 3" thk. First Grade, 2" minus crusher run to both sides of the drain. Compaction must be done to 98% Proctor Density.		Cu.yd	23	

3.45	Provide for the construction of grill to RC drain in 4 ft section using 1 1/2" x 1 1/2" x 1/4" thk MS angle & 5/8" dia MS rods @ 4" ctrs, both directions. Allow for grill to be painted all sides	Ln Ft	165		
	<u>RC Slab leading from road to middle gate- 15' wide x 10' long x 4" thk.</u>				
3.46	Provide for leveling of area where slab is to be constructed & proof roll to make good.	Sq Yd	17		
3.47	Provide for sand filling & compaction to take slab, 4" thk	Cu Yd	2		
	TOTAL CARRIED FORWARD				

	TOTAL BROUGHT FORWARD				
3.48	Provide for water tight form work, allow for all straps & braces etc, (arv. depth 4")	Sq Yd	2		
3.49	Suppy, place and install No. 65 BRC for slab, include for securing same and all necessary laps.	Sq Yd	17		
3.50	Supply and place 3500 psi (28 days) concrete to slab, allow for compaction/vibrating concrete.(10' x 15' x 4")	Cu Yd	2		
	BILL No. 3 - TO BILL SUMMARY				

BILL No.4: OLD STORES BUILDING WORKS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (\$)
	<u>General Note</u>				
	<i>All rates must include for transportation, materials, labor, scaffolding, machinery and equipment, taxes, overheads and profits. A site visit must be done prior to pricing items.</i>				

	<i>The existing is a two (2) nr. concrete and timber building with zinc sheets for covering of wall and roof, the approximate size of this is 40' wide x 88' long x 30' high.</i>				
4.1	Allow for the removal of electrical cable leading to building, same must be done by GPL or with GPL's personnel supervision, Contractor will pay all cost to undertake this work forthwith.	Sum	...	...
4.2	Allow for the dismantling of the existing sluice and lifting system, including metal frame that is supporting same, all work are to be done to the direction of the engineer.	Sum	...	...
4.3	Allow for the dismantling of the existing metal rack shelves, same must be loosen by removing bolts and shelves and packed carefully. All parts that are damage due to contractor's negligence will have to be replaced by the contractor.	Nr	10		
4.4	Allow for the dismantling of the existing timber shelves, same must be loosen by removing bolts and shelves and packed carefully. All parts that are damage due to contractor's negligence will have to be replaced by the contractor.	Nr	6		
4.5	Allow for the removal of zinc sheets and windows from wall of first floor and roof of building as directed by the Engineer. All materials that were removed must be packed carefully on site.	Sq.yd	800		
4.6	Allow for the removal of timber frame from building, to roof and first floor of the building. These members includes but are not limited to: step, floor joists, studs, plate, floor boards, rafter, laths, fascia, verandah also, etc.	Sum	...	...
	TOTAL CARRIED FORWARD				

	TOTAL BROUGHT FORWARD				
4.7	Allow for mid size / large excavator to demolish building, including: walls, floor and foundation.	Nr	1		

4.8	Allow for mid size / large skid steer to load all debris and spoils into dump trucks and remove same from compound.	Nr	1		
4.9	Allow for dump trucks (10 Tons minimum) to remove all debris and spoils	Nr	2		
4.10	Supply, place, compact (95% proctor density) and level white sand to area when works are deemed satisfactory completed by the Engineer.	Cu.yd	100		
4.11	Supply, place, grade, shape (2% gradient) and compact 2" thk. (after compaction) First Grade, 2" minus crusher run above white sand layer	Cu.yd	32		
	BILL No. 4 - TO BILL SUMMARY				

BILL No.5: SECURITY HUT WORKS (MAIN ENTRANCE TO I.S.P.S. PARKING LOT)

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>Guard Hut: 8' x 14'</u>				
	Earth Works				
5.1	Provide for the excavation of foundation trench for strip foundation to a minimum depth of 14". Rate to cater for compacting same, filling all voids in soil.	Cu.yd	3		
	Sandfill				
5.2	Supply, place and compact 4" thick white sand (95% proctor density) to foundation strip to receive blinding	Cu.yd	1		
5.3	Supply, place and compact white sand (95% proctor density) to inside of kerb to take floor	Cu.yd	3		
	Formwork				
5.4	Supply and install rough formwork to foundation and floor slab	Sq.yd	7.3		

5.5	Supply and install dressed formwork to Columns & Beams	Sq.yd	19		
	Reinforcements				
5.6	Supply and install 1/2" dia. Corrugated HT Main Bars to strip foundation inclusive of all laps, binding wires, spacers, etc. (4 nr.)	Lbs	132		
5.7	Supply and install 1/2" dia. Transversal U-bars to strip foundation @ 8" ctrs	Lbs	75		
5.8	Supply and install 3/8" dia. x 2' long MS bars as vertical support for wall @ 16" ctrs	Lbs	22		
5.9	Supply and install 1/2" dia. HT main bars to columns	Lbs	102		
5.10	Supply and install 1/4" dia. MS bars as stirrups @ 8" ctrs to columns	Lbs	18		
5.11	Supply and install 1/2" dia. HT main bars to beam	Lbs	132		
5.12	Supply and install 3/8" dia. MS bars as stirrups @ 7" ctrs to beam	Lbs	43		
5.13	Supply and install 1/2" dia. HT bars @ 8" ctrs, both directions for step up	Lbs	14		
	TOTAL CARRIED FORWARD				
	TOTAL BROUGHT FORWARD				
	<i>Concrete Works - Supply, place and compact mechanical mixed Structural concrete 3500 psi at 28 days, using 3/4" minus aggregates</i>				
5.14	To strip foundation (18" x 44' x 7" thk)	Cu.yd	1.5		
5.15	To Floor Slab (8' x 14' x 4" thk)	Cu.yd	1.4		
5.16	To Columns (8" x 8" x 9' high) (4 nr)	Cu.yd	0.6		
5.17	To Beam (6" wide x 8" depth x 44' long)	Cu.yd	0.6		
5.18	To step for each external door (12" wide x 3' long x 4" thk.) (2 nr.)	Cu.yd	0.1		
	Block Works				

5.19	Supply and install 6" x 8" x 16" H.C.B laid in stretcher bond 1:3 cement/sand mortar for kerb, all cavities must be filled with 3,500 psi structural concrete mix. (1 nr block height)	Sq.yd	3.3		
5.20	Supply and install 4" thk H.C.B laid in stretcher bond 1:3 cement/sand mortar for external walls.	Sq.yd	26		
5.21	Provide for the rendering of all concrete surfaces with 1/2" thick 1:3 cement/sand mix inclusive of sponge finish or any other finish as recommended by the Engineer.	Sq.yd	56		
	Carpentry Works				
5.22	Supply and install Purpleheart/Greenheart panel door in two halves (32" x 80"), rate to include for painting and installing same.	Nr	2		
5.23	Supply and install Purpleheart/Greenheart panel half door (32" wide x 40" high), rate to include for painting and installing same.	Nr	1		
5.24	Supply and install 2" x 4" GH Perimeter Plate, same should be secured to perimeter beam with 1/2" dia x 5" long MS bolt and nut @ 4' ctrs.	Bm	30		
5.25	Supply and install 2" x 8" x 6' GH ridge	Bm	8		
5.26	Supply and install 2" x 6" x 3' 6" GH Ridge Support	Bm	7		
5.27	Supply and install 2" x 6" x 9' 6" GH Hip Rafters	Bm	38		
5.28	Supply and install 2" x 4" GH common rafters @ 3' ctrs	Bm	40		
5.29	Supply and install 1" x 6" Kabakalli Laths @ 3' ctrs	Bm	71		
5.30	Supply and install 1" x 8" GH Fascia	Bm	50		
	TOTAL CARRIED FORWARD				

	TOTAL BROUGHT FORWARD				
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5.31	Supply and install 2" x 6" dressed GH Door frame	Bm	41		
5.32	Supply and install 1" x 2" dressed GH door jamb	Ln.ft	41		
5.33	Supply and install 2" x 4" x 8' GH ceiling joist @ 2' ctrs	Bm	43		
5.34	Supply and install 1" x 3" silverballi noggings to take ceiling @ 2' ctrs	Ln.ft	70		
5.35	Supply and install PVC ceiling using 8" wide King Panels, inclusive of drywall screws, taping of all joints and corners and perimeter mouldings, etc.	Sq.yd	21		
5.36	Provide for the construction of a counter unit 2'-0" wide x 5'-0" long, with a open cupboard section with middle shelf, Unit to be constructed from dressed green heart members for frame and the counter from square edge silverballi boards with arborite finish to top and edges, secure by grooving and fit and screws, allow for pre-drilling.	Nr	1		
	Roofing Works				
5.37	Supply and install 28 guage BLUE pre-painted galvalum galvanized regular profile roofing sheets, inclusive of zinc screws, neoprene washers and water resistant clear silicone.	Sq.yd	28		
5.38	Supply and install 28 guage x 30" wide BLUE pre-painted galvalum galvanized plain sheet for ridge and hip of building, inclusive of zinc screws, neoprene washers and water resistant clear silicone.	Ln.ft	50		
	Painting & Finishes				
5.39	Provide for the application of one (1) nr. Prime coat and two (2) nr. finishing coats of emulsion paint to all concrete surfaces. Rate is inclusive of cleaning and filling all defects before paint application. GPL colour scheme will be applied.	Sq.yd	56		
5.40	Provide for the application of one (1) nr. Prime coat and two (2) nr. finishing coats of oil paint timber members. Rate is inclusive of cleaning and	Sq.yd	20		

	filling all defects before paint application. GPL colour scheme will be applied				
5.41	Supply and install 18" x 18" non-skid PORCELAIN tiles to floor. Rate to cater for all materials to secure same to floor, such as tin set, grouting, etc. The colour and pattern must be approved by the Engineer before installation.	Sq.yd	12.4		
	TOTAL CARRIED FORWARD				

	TOTAL BROUGHT FORWARD				
5.42	Supply and install 4" wide skirting with same tiles, Rate to cater for all materials to secure same to walls, such as tin set, grouting, etc. The colour and pattern will be same as floor tiles.	Ln.ft	38		
	Glazing & Ironmongery				
5.43	Supply and install 30" x 48" Aluminium Frame SASH windows	Nr	6		
5.44	Supply and install 48" x 60" Aluminium Frame Fixed see through type window	Nr	1		
5.45	Yale/Union Cylindrical Locks	Nr	2		
5.46	4" Butt Hinges	Nr	10		
5.47	6" long bolts	Nr	3		
5.48	6" long solid Brass Door Handles	Nr	2		
5.49	Hook and eye latch to secure door to wall	Nr	2		
5.50	Supply and install 6" x 9" PVC air vents to eaves of building	Nr	6		
	Guttering				

5.51	Supply and install all necessary joints, stop ends, brackets, downspout, etc. for 6" ogee profile guttering.	Ln.ft	56		
5.52	Supply and install 2" dia PVC downpipe, inclusive of securing same with metal straps at 3' ctrs.	Ln.ft	16		
	BILL No. 5 - TO BILL SUMMARY				

BILL No.6: I.S.P.S. SOUTHERN PERIMETER FENCE & HARD PAD WORKS					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>Fence measuring: 292 Ft (including gates)</u>				
	Earth Works				
6.1	Provide for the excavation of foundation trench for isolated pad foundation to a minimum depth of 18" @ 9' ctrs. Rate to cater for compacting same, filling all voids in soil.	Cu.yd	6		
6.2	Supply, place and compact 4" thick white sand (95% proctor density) to foundation strip and pads	Cu.yd	3		
	Formwork				
6.3	Supply and install rough formwork to foundation	Sq.yd	18		
6.4	Supply and install rough finish formwork to columns to western side only	Sq.yd	6		
	Reinforcements				
6.5	Supply and install 1/2" dia. Corrugated HT Main Bars to strip foundation @ 6" ctrs, inclusive of all laps, binding wires, spacers, etc.	Lbs	178		
6.6	Supply and install 3/8" dia. U-bars as Transversal bars to strip foundation @ 8" ctrs	Lbs	46		
6.7	Supply and install 1/2" dia. Corrugated HT U-bars to isolated bases @ 6" ctrs	Lbs	260		

6.8	Supply and install 1/2" dia. Corrugated HT bars to columns (3 nr)	Lbs	80		
6.9	Supply and install 1/4" dia. stirrups to columns @ 7" crs.	Lbs	13		
6.10	Supply and install 3/8" dia. X 2' long MS bars as vertical support for wall @ 16" ctrs	Lbs	76		
	Concrete Works				
	Supply ,place and compact structural concrete 3,500 PSI at 28 days using 3/4" minus aggregates (all concrete to be mechanically blended using a concrete ransom) to:				
6.11	Strip Foundation (18" wide x 9' 6" long x 6" thk & 12" wide x 66' 6" Long x 6" thk.)	Cu.yd	1.6		
	TOTAL CARRIED FORWARD				

	TOTAL BROUGHT FORWARD				
6.12	Pad Foundation (2 nr - 30" x 30" x 6" thk & 33 nr - 24" x 24" x 6" thk.)	Cu.yd	2.8		
6.13	Columns (6" x 6" x 2' high) (12 nr)	Cu.yd	0.2		
	H.C.B. Wall				
6.14	Supply, lay and install Hollow Concrete Blocks (4" x 8" x 16") infill with 3,000 psi concrete mix. Three (3) nr. Rows only from foundation level to western side only	Sq.yd	19		
6.15	Provide for rendering of all concrete surfaces, including walls and columns using 1:3 concrete mix (1/2" thk)	Sq.yd	42		
	Ironmongry				
6.16	Supply and install 2" dia. x 9' long galvanized pipe, the bottom of pipes must have 6" long min. crabs to secure pipes into concrete foundation. (31 nr)	Ln.ft	279		
6.17	Supply and install 4" dia. x 9' long galvanized pipe for gate posts, the bottom of pipes must have 6" long min. crabs to secure pipes into concrete foundation. (4 nr)	Ln.ft	36		

6.18	Supply and install 2" dia galvanized pipe, placed horizontally to top, middle and bottom of 2" vertical pipes, inclusive of 1/4" dia hook at 18" crs to secure chainlink mesh.	Ln.ft	825		
6.19	Supply and install 2" dia x 14" long galvanized pipe placed at 45° angle to take security razor wire, same must be secured by welding to vertical 2" dia pipes. (35 nr). Rate should include for PVC caps to each end.	Ln.ft	41		
6.20	Supply and install 1/2" dia. HT bars for support of razor wire, same must be secured to 2" dia. Pipe by welding. (2 nr. Rows)	Ln.ft	550		
6.21	Supply and install 10 GAUGE Chain Link Mesh, mesh must be secured to galvanized pipes	Sq.yd	275		
6.22	Supply and install stainless steel razor wire @ 6" spacing between wraps to fence.	Ln.ft	275		
6.23	Provide for the servicing of the existing 5' x 8' metal gate leading to wharf, all defective members must be replace and entire gate painted after installation.	Sum	...		
6.24	Provide for the fabrication of 8' high x 12' wide metal sliding gate, gate must be constructed using 1 1/2" dia. galvanized pipe frame for perimeter and also for verticals at 4" ctrs. Rate must cater for securing same to metal posts, with bottom metal channel, pulleys, etc. All members are to be painted with two (2) finishing coats of anti-corrosive paint.	Nr	1		
	TOTAL CARRIED FORWARD				

	TOTAL BROUGHT FORWARD				
	Painting				
6.25	Provide for the application of one (1) nr. Prime coat and two (2) nr. Finishing coats of emulsion paint to all exposed concrete surfaces. Colour must be same as GPL colour scheme.	Sq.yd	42		

6.26	Provide for the application of two (2) nr. Finishing coats of BLUE anti-corrosive paint to all pipes and HT bars	Ln.ft	1,700		
6.27	Provide for the application of two (2) nr. Finishing coats of WHITE anti-corrosive paint to all chain link mesh	Sq.yd	275		
	<u>HARD PAD WORKS</u>				
	Earth Works				
6.28	Supply, place, grade, shape and compact 2" Thk. white sand/sand clay (60:40 mix) to level entire area.	Cu.yd	40		
	Formwork				
6.29	Supply and install rough formwork. Rate is inclusive of straps, pickets, etc.	Sq.yd	3		
	Reinforcements				
6.30	Supply and install No. 65 BRC to all slabs, rate to cater for all necessary laps.	Sq.yd	687		
	Construction Plastic				
6.31	Supply and install 500 DPM above crusher run surface and to sides of slab, rate to cater for appropriate laps.	Sq.yd	700		
	Concrete Works				
	<i>Supply ,place and compact structural concrete 3,500 PSI at 28 days using 3/4" minus aggregates (all concrete to be mechanically blended using a concrete ransom) to:</i>				
6.32	Concrete Slab as per drawing (4" thk.)	Cu.yd	80		
	TOTAL CARRIED FORWARD				

	TOTAL BROUGHT FORWARD				
	Contraction Joints				
6.33	Provide for the installation of expansion joints to concrete slab. Same should measure: 1/2" wide x 1 1/2" depth minimum. The recommended method is by cutting the concrete after same is poured or any other method as recommended by the Engineer.	Ln.ft	720		
6.34	Provide for the installation of 1/2" thk x 3/4" depth PEJF/equivalent joint fill backing rod material and seal same with DEKO/equivalent waterproof expansion joint sealant material between 15' sections. Rate is inclusive of gun to be used with sealant material.	Ln.ft	720		
	BILL No. 6 - TO BILL SUMMARY				

CLIENT:	GUYANA POWER AND LIGHT INC	
PROJECT:	REHABILITATION OF PERIMETER FENCES, GUARD HUT AND DEMOLITION OF BUILDING AT KINGSTON POWER STATION COMPOUND, KINGSTON, GEORGETOWN	
MAIN SUMMARY		
BILL No.	DESCRIPTION	AMOUNT (\$)
1	PRELIMINARIES	
2	DEMOLITION WORKS	
3	EASTERN PERIMETER FENCE WORKS	
4	OLD STORES BUILDING WORKS	
5	SECURITY HUT WORKS (MAIN ENTRANCE TO I.S.P.S. PARKING LOT)	

6	I.S.P.S. SOUTHERN PERIMETER FENCE & HARD PAD WORKS	
	Sub Total	
	Contingency (10% of Sub Total)	
GRAND TOTAL TO FORM TENDER		

TECHNICAL SPECIFICATIONS



TECHNICAL SPECIFICATIONS

- 1.0 GENERAL AND PRELIMINARIES
- 2.0 BLOCKWORK
- 3.0 BRICKWORK
- 4.0 CARPENTARY & JOINERY
- 5.0 CONCRETE
- 6.0 FLOOR, WALL AND CEILING FINISHES
- 7.0 PAINTING
- 8.0 PLUMBING
- 9.0 ROOFING AND GUTTERS
- 10.0 ELECTRICAL INSTALLATIONS

GENERAL AND PRELIMINARIES

- A. Allow for tools, vehicles and transport for work people
- B. Allow for safety, health and welfare of workplace and work people
- C. Allow for safe guarding the works, materials and plant against damage , theft
- D. Allow for keeping noise levels down to a minimum
- E. Allow for the provision of water for the works and work site
- F. Allow for providing lighting and power for the Works
- G. Allow for the construction and maintenance of temporary buildings
- H. Allow for the construction, furnishing and maintenance of a site office of at lest 150 sq. ft. of floor space
- I. Allow for general scaffolding for the Works
- J. Allow for protecting the Works from inclement weather
- K. Allow for keeping the site clean and tidy during construction and for a final cleaning to be carried out on completion
- L. Allow for costs pertaining to the contract/site administration overheads e.g. storekeeping, purchasing, book-keeping, Head Office charges.
- M. All discarded materials shall be the property of the Sponsor

GENERAL

2.1 No separate payments shall be made for complying with provisions of the General Specifications. In particular no separate payment shall be made for the construction and maintenance of temporary drain diversions and testing of materials.

Whether specified or not no separate measurement shall be made in respect of items to be built in or fixed to concrete or timber; for painting contact surfaces; drilling; bolting inclusive of bolts nuts and washers; jointing and jointing materials; shuttering; boxing out and filing thereof; grouting; packing; making good; cutting; waste; labour, materials; Temporary Work; Construction Plant; storing; handling and all incidental work to the item concerned and their surroundings.

2.2 EARTHWORKS IN STRUCTURE

2.3 Excavation in open cut shall be measured where the sides of the finished excavation are shown on the Drawings as free-standing.

Excavation in foundation shall be measured as the volume of the product of the horizontal area of the base of the Permanent Work to be constructed and the mean depth from the original undisturbed surface or as the volume below the said surface displaced by the Permanent Work or to the limits of excavation shown on the Drawings, whichever is the greater and which is defined as the net excavation.

Back-fill shall be measured as the volume from the approved excavation level up to the formation level as shown in the drawings or ordered by the Engineer. The cost of special compaction shall be included in the rates.

Fill from approved borrow area shall be arranged by the Contractor irrespective of any haul distance and the volume available from associated excavation.

2.4 CONCRETE WORKS

Unless otherwise described in the Bill of Quantities, concrete work as specified in the Technical Specification shall be measured in terms of three categories of work, namely; concrete shuttering and reinforcement as described below and set out in the Bill of Quantities.

No separate payment shall be made, inter alia, for the surface finishes whether given by shuttering or obtained from the use of tamped screed boards, wood or steel floats; mixing concrete; transporting; placing and compacting concrete; construction joints (whether shown on the Drawings or not; precaution for concreting in unfavorable weather; curing; ascertaining requirements of reinforcement, bending, cutting and fixing reinforcement or work space for erection and handling back shuttering.

2.5 CONCRETE

Concrete shall be measured as the net volume of concrete to the dimensions specified in the Permanent Works, but no deductions shall be made in respect of the volume occupied by reinforcement or in respect of small openings, recesses, chases and embedded fixtures.

2.6 SHUTTERING

Shuttering shall be measured for all final surfaces of in situ concrete which require temporary support during casting except where otherwise specified or indicating on the Drawings.

2.7 REINFORCEMENT

Steel bar or rod reinforcement used be measured by mass, as calculated from the dimensions shown on the Drawings. Laps in reinforcement shall not be measured except where these are indicated on the Drawings.

Wire or other material required for support and securing the reinforcement in its correct position shall not be measured.

2.8 TIMBER

Measurement shall be made for the payment of timber used in the Permanent Works of the structure. The rate for Greenheart members include for the supply, handling, labour, waste, painting, fixing and placing in position as per Drawings.

2.9 LUMP SUM ITEMS

These items shall be considered for payment by the Engineer partly/wholly based on the judgement and satisfaction of the Engineer in respect of progress, quantity and quality of the Works done under each item.

2.0 BLOCKWORK

CEMENT AND WATER

Cement, sand and water shall be as described under "CONCRETE".

MORTAR

Mortar shall be mixed in 1:4 proportions on site in a similar manner to concrete. Mortar which has commenced to set is not to be re-used.

CLAY BLOCKS

Hollow clay blocks shall conform to BS 3921:1965 of first quality, good, sound hard and well burnt, true to shape and size, ribbed and scored for plaster.

CONCRETE BLOCKS

Concrete blocks shall conform to BS 1180:1944 of first quality, good, sound, hard and well cured and true to shape and size, of the types described.

Thoroughly wet concrete blocks before laying. Solidly bed all joints of block work with mortar 1/8" thick. Tool joints of exposed block work which is not to be plastered for a depth of 3/8" before the mortar has set to form a concave joint and leave the edges of the blocks well defined.

Build block work in running or garden bond and carry up regularly and truly with no part rising more than three courses above the adjoining work. Keep perpendiculars joints etc. Strictly true and the whole properly bonded together. Build cross walls at the same time with main walls and properly bond together.

3.0 BRICKWORK

Clay bricks shall be used as specified on the drawing.

All clay bricks shall be of thickness equal to the wall thickness shown on the drawings thoroughly saturated with water before placing and shall be wet at the time of laying, all joints to be thoroughly buttered up with the mortar as the work proceeds and to be not more than 3/8" thick.

Clay bricks shall be the full nominal thickness and shall be well built of good shape free from cranks. The use of badly cut bricks will not be permitted.

All masonry is to be built true to line, plumb, square and level with vertical joints in proper alignment.

4.0 CARPENTRY AND JOINERY

QUALITY

All timber shall be the best quality available of the respective types, free from rot, excessively large or loose knots, splits, fungus or other defects.

SPECIES

Sawn timber for structural members' joints, trusses etc. shall be greenheart or other hardwood approved by the Engineer with the standard minimum strength characteristics as set out in the British Standard Code of Practice 112:1967. Sawn timber for non-structural members shall be Greenheart, Purpleheart, Kabukalli, Tatabu, Shibadan, Manni, Toura nira, Hubaballi or other species approved by the Engineer.

All joinery timber is to be Crabwood, Brown Silverballi, Yellow Silverballi, Dukali, Simarupa, Hububalli or other species approved by the Engineer, dried to achieve an equilibrium moisture content of around 14%.

CARPENTRY WORK

The workmanship shall be of the best quality. Scantlings and boring shall be accurately sawn and be of uniform width and thickness throughout.

Carpentry shall be accurately set out in strict accordance with the drawings and shall be pruned together and securely fixed with properly made joints. All brads, nails, screws, plugs and pins are to be provided as necessary.

All timber of large scantlings is to be sawn immediately the building is commenced to allow for any shrinking that may take place. Boarding to treads and landings of steps and staircase shall be greenheart.

NAILS, SCREWS AND BOLTS

Nails, screws and bolts where applicable shall be in accordance with BS 1202, 1210 and 916 respectively.

CHIPBOARD

The Chipboard shall be made from particles of wood bonded with synthetic resin all in accordance with BS 2604 with the inclusion of a termite inhibiting chemical.

HARDBOARD

Hardboard shall be 1/8" thick standard minimum having a density of 50 lb per cu. ft

EXPOSED FACES

Timber which is to be exposed in the finished work shall be 'dressed' unless otherwise described or instructed.

TOLERANCES

An allowance of one-eighth of an inch shall be permitted from the nominal size for each dressed face of the timber; sawn timbers shall be the full nominal thickness.

PLYWOOD

Plywood shall be external and internal quality in accordance with BS 1455 but with termite resistant glue.

DOORS

Doors shall comply in all respects with BS 495 part 2 and shall be constructed in a joinery shop or by a specialist joinery manufacturer. Timber for use in doors shall be specially selected for straightness and be free from faults, tenoned, glued and pinned together. The rates for doors shall include for ironmongery and the thicknesses. Plywood covering for doors shall be glued to the framework and lipped at all edges.

PLASTIC LAMINATE

Plastic laminate shall be arborite, fornica or other equal and approved and shall be as BS 3749 and be pressure-bonded to timber plywood or other backing with a top grade contact adhesive.

NAILS

Prices for carpenters' and joiners' work shall include for all labours, cuttings, splays, notchings, halving to other timbers, holes, countersinking, mortising, tenoning and wedging, pre-drilling, hardwood pins, gluing and making joints with lead, plugging with lead, plugging to concrete or block work where so described. All timber work shall be left clear and clean and the Contractor is to allow for this in his prices.

5.0 CONCRETE

CEMENT

Cement used in the Works except where otherwise specified shall be Ordinary Portland Cement complying with the requirements of B.S. 12 part 2 or AASHO M85/ASTM C150. All cement shall be delivered in the original sealed containers of the manufacturer. No re-bagged cement will be permitted to be brought on site. Cement shall be stored 18" above the ground, protected from the weather.

Cement which has become stale with hardened lumps shall not be used in the Works.

AGGREGATE

The aggregates for use in concrete shall conform in all respects with BS 882 or AASHO M6 and shall comprise inert, inorganic mineral matter only.

Fine aggregate for concrete shall be clean natural white sand.

The coarse aggregate shall consist of natural gravel crushed stone. The grading shall be within the limits laid down in BS 882 nominal size $\frac{3}{4}$ " to $3/16$ ". The grading shall be such as to produce a dense concrete of the specified proportions, and of a consistency that will work readily into positions without segregation and without the use of excessive water content.

All aggregate shall be clean and free from impurities.

All aggregate shall be stored in such a manner as to prevent segregation of sizes and to avoid the inclusion of dirt and other foreign material.

WATER

The water to be used in the Works shall be clean and free from all harmful matter in suspension or solution and shall be from a source approved by the Engineer. Sea water is not to be used under any circumstances.

REINFORCEMENT

All reinforcement steel bars shall be mild steel bars and shall comply with BS 4449. Mesh reinforcement is to be welded steel fabric complying with BS 4483. Reinforcing steel shall be thoroughly cleaned of all mud, oil, rust and other foreign matter before surrounding with concrete.

The number, size, form and position of all steel reinforcing bars, ties, links, stirrups and other parts of the reinforcement shall be in exact accordance with the Drawings, BS 4466 and CP 8110 and they shall be kept in the correct position and with the required cover without displacement during the process of compacting the concrete in place in a manner approved by the Engineer.

Bends, cranks or other labours on reinforcement bars shall be carefully formed in accordance with the Drawings, BS 4466 and CP 8110.

The bars shall be bent cold in a manner which does not injure the material. Where splices or overlapping in reinforcement are required the bars shall, unless otherwise shown on the Drawings have an overlap of not less than thirty diameters where a U-hook is employed on each of the overlapping bars and forty-five diameters for bars without hooks.

Timber blocks for wedging the steel off the formwork will not be allowed.

Bars shall be bound together with best black annealed mild steel wire No. 16 SWG in diameter. The binding shall be twisted tight with pliers and the free ends of the binding wire shall be bent inwards.

The straightening or re-bending of steel already bent will not be permitted.

MIXING CONCRETE

Concrete shall consist of cement, graded aggregate and water thoroughly mixed and compacted to achieve a satisfactory strength and workability. The concrete shall be thoroughly compacted using a mechanical vibrator of a type approved by the Engineer.

The mixed concrete shall have a minimum cube crushing strength of 3000lb/sq. in. when tested in accordance with BS 1881. The Engineer may take samples of freshly mixed concrete at any time for testing in this manner. The nominal volumetric proportion of the mix shall be one part cement to two parts of fine aggregates to four parts coarse aggregates.

The Contractor will inform the Engineer of the exact proportions which he proposes to use in order to achieve the required strength.

Slump tolerances for the mix shall be agreed with the Engineer before commencement of the Works and these shall be strictly adhered to during the works. Suggest permissible ranges.

Footings:	1" – 3"
Slabs, beams, columns	1" – 4"

PLACING OF CONCRETE

The concrete shall be deposited in the form as nearly as possible in its final position without segregation and in a manner to avoid displacement of the reinforcement.

The mixing of concrete by batch mixer shall continue not less than 1.5 minutes after all the materials are in the mixer and the mixer shall rotate at a speed of 14 to 20 revolutions per minute. When hand-mixing is authorized by the Engineer it shall be done on a water-tight platform. The fine and coarse aggregate in appropriate shall be spread on the platform and thoroughly blended before the cement is spread evenly over the blended aggregate. Only sufficient water to produce the desire consistency shall be added as the batch is turned.

Concrete shall be thoroughly compacted during placing and shall be carefully worked around all reinforcement and into the sides and corners of the formwork, using a heavy duty high frequency vibrator.

FORMWORK

Formwork and its loading shall be sufficiently strong to carry the work and all incidentals loading. The props and lateral supports shall be sufficiently closely spaced to prevent displacement or visible deflection of the shutters under the weight of the hydraulic pressure of the wet concrete. All joints in the form and joints between the formwork and previous work shall be sufficiently tight to prevent loss of liquid from the concrete through these joints.

Formwork must be constructed to the approval of the Engineer.

The inside surfaced of forms shall be coated with a releasing agent to the approval of the Engineer.

The position of all expansion and construction joints shall be agreed with the Engineer before work is commenced.

The structure shall not be distorted, damaged or overloaded in any way by the removal of the formwork by the concrete members.

The responsibility for the safe removal of any part of the formwork shall rest with the Contractor.

6.0 FLOORS, WALL AND CEILING FINISHES

CEMENT FINISHINGS

Cement Finishing's shall be laid with a mix of cement and sand 1:3 with the addition of 'Cementone Nr. 8', 'Lithurin', or other approved hardening compound.

GRANOLITHIC FINISHINGS

Granolithic finishings shall be laid with a mix of cement, sand and hard limestone chippings graded from ¼ inch (6mm) to 1/8 inch, (3mm) and free from dust in the proportions of 1:1:2 with the addition of an approved hardening compound.

After placing and compaction of the finishings, the surface shall be lightly trowelled to smooth out surface marks and shall then be left until such time as it can withstand a hard trowelling without the course aggregate being disturbed. Dry cement shall not be used to hasten the final trowelling.

CERAMIC FLOOR TILING

Ceramic floor tiling shall be accurately laid in a 3/8 inch (10 mm) thick bed or mortar or alternatively fixed with an approved adhesive to a trowelled bed. Joints between tiles shall not exceed 1/8 inch (3 mm) in

width and grouting shall be with white or coloured cement. Tiles bedded in mortar shall be well-soaked in clean water immediately prior to laying.

TERRAZZO

White and coloured cements shall be 'Cementone or other approved and pigments shall comply with B.S. 1014.

Aggregates for terrazzo shall consist of crushed Italian marble chippings of approved colour and size or approved equivalent. The chippings shall be sharp and angular, not flakey, and free from dirt, dust or other impurities and shall contain no fines.

All work shall be carried out in accordance with CP 204 part 3.

The Terrazzo shall be composed of 2 ½ parts of marble chippings of up to 3/8 inch (10 mm) gauge or approved equivalent and one part of coloured cement. The finished appearance of in-situ and precast work shall be identical. Terrazzo tiles shall be through in shape and have a smooth even finish. Tiles shall be laid in 3/8 inch (10 mm) thick bed of mortar. Joints between tiles shall not exceed 1/8 inch (3 mm) in width and grouting shall be well soaked in clean water immediately prior to laying.

DIVIDING STRIPS

Dividing strips shall be set accurately in position, all joints being closely made at points of intersections only. On completion of the floor finishing, the strip shall be level with the finish and completely visible.

CURING AND PROTECTION

In-situ floor finishings shall be cured and protected by covering with polythene sheet or other impervious material for at least five (5) days after final trowelling or grinding. Floor tiling shall be similarly covered until practical completion of the Works.

PLASTERWORK

The mix for plasterwork shall be 1:3 cement and sand with the addition of an approved mortar plasticizer and shall be carried out in the number of coats specified. Single-coat work shall be ½ inch (12 mm) thick and two-coat work ¾ inch (19 mm) thick in two-coat work, the first coat shall be well-scored to assist adhesion of the second coat.

Unless otherwise described, all internal work shall be finished with a steel trowel and all external work with a wood float. The plasterwork shall be finished with surfaces perfectly flat and flush to stand the

straight-edge every way. All work shall be free from cranks, blisters or other defects and be left perfectly clean. The Contractor shall complete each section of the work in one operation. External angles shall be true and slightly rounded.

Solid bases shall be thoroughly brushed to remove dust, efflorescent salts and loose particles. High suction bases shall be thoroughly wetted immediately before plastering.

CERAMIC WALL TILING

Ceramic wall tiles shall comply with the provisions of B.S. 1281 and be fixed in accordance with CP 212.

BEDS AND BACKINGS

Beds and backings shall be screeded, floated or trowelled as described. The materials for beds shall be mixed with a minimum of water so that no water appears on the surface when screeded, floated or trowelled. Screeded backings for wall tiling may be likely scored to assist adhesion.

7.0 PAINTING

Prior to the application of any paint on any item, the Engineer must verify that the particular item is as per the Drawings and Specifications.

All paints are to be delivered to site in the manufacturers' sealed containers and to be used strictly in accordance with the manufacturers' instructions. All materials used unless otherwise stated shall be **anti-fungus**.

PREPARATION AND APPLICATION

Thoroughly dust and clean down surfaces to be painted, cut out cranks, stop holes and clean steelwork of rust in accordance with approved practice.

Apply paint by brush, roller or spray with the minimum of dilution.

Allow to dry well and rub down each coat of paint before the next is applied.

No paint shall be applied to a damp surface, and no external painting shall be carried out during wet weather.

WOODWORK

All wood surfaces to be painted shall be properly rubbed down, timed and stopped before painting.

Woodwork is to be painted with one coat of lead free wood primer after which all cracks, holes etc. shall be filled with anti-fungus putty which shall be allowed to set before sanding and applying two coats of oil paint.

All timber will be painted as specified above with the exception of the underside of floors, traders, landing boards and all roof members when not exposed.

METAL WORK

The surfaces of metal work to be painted shall be prepared by removing dirt, grease etc. with an approved solvent and rust and scale by wire brushing and allowed to dry.

The surfaces are to be painted with one coat of primer and two coats of oil paint allowing at least one hour drying between coats.

MASONRY

Masonry surfaces are to be prepared for painting by allowing to dry for as long as possible remaining all mortar splashes by rubbing with a pumice or flat stone and thoroughly brushing to remove dust.

The priming coat shall be allowed to dry. All cracks, holes etc. shall then be filled with patent filler which shall be allowed to set and sanded to a smooth finish before the application of subsequent coats.

8.0 PLUMBING

GENERAL

The plumbing works shall be carried out by experienced craftsmen and shall be carried out in accordance with the local building by-laws.

WATER SUPPLY AND WASTE PIPES

PVC pipes shall conform to BS 3505: 1968 for "unplasticised PVC pipes". Fittings shall be of the solvent-weldable type. Traps shall comply with the provisions of B.S. 3943 and have a zinc seal. Brackets and clips shall be of non-ferrous metal or P.V.C. coated steel.

Pitch fiber pipes and fittings shall conform to BS 2760: 1966/7.

Cast iron pipes and fittings shall conform to BS 78: 1961.

SOIL PIPES

To be 4" diameter PVC pitch fiber pipe jointed as per manufacturer's instructions, fixed to concrete columns with metal bands and to timber parts by heavy duty timber screws and brackets, the soil pipe is to be connected to the septic tank.

PEDESTAL CLOSET

The pedestal closet is to be glazed earthenware with trap, hinged plastic seat cover, 3 or 2 ½ gallon white glazed earth ware low level cistern with 1 ½" flush pipe. The closet is to be screwed to wood floor and jointed to the soil pipe. The cistern is to be screwed to bearers fixed to the wall.

The whole of the service is to be tested and left in satisfactory working order.

SOLDER

Plumbing's solder shall comply with B.S. 219 Grade D and flux shall be Tallow.

TAPS AND STOP VALVES

Drain-off taps and stop-valves shall comply with B.S. 1010.

9.0 ROOFING AND GUTTERS

GALVANISED STEEL SHEETING

Roof covering shall be corrugated galvanized zinc sheeting of approved manufacture to the gauge specified conforming in all respects to BS 3083 (for standard corrugated sheeting).

ALUMINUM SHEETING

Aluminum sheet roofing shall comply with B.S. 2855 (for corrugated sheeting) and B.S. 3428 (for troughed sheeting).

Fixing aluminum sheets to timber shall be with aluminum alloy drive screws with saddles, plastic washers and covers.

FIXING ROOF SHEETING

Lay sheets as described with at least one full corrugated side lap or 6 inches over lap. Sheets shall be securely nailed to the roof with galvanized broad-headed roof nails of suitable length at intervals not exceeding ten inches to give continuous lines. The laying of sheets shall commence at the western-most end of the roof slopes so that exposed edges are downwind.

RIDGINGS AND FLASHINGS

Ridges and flashings shall be 22 gauge aluminum or 24 gauge galvanized sheeting cut to the size, and bent to the profile shown and accurately fixed with galvanized drive screws and reopened washers.

WATER TIGHT

Leave roofs clean and watertight at completion to the satisfaction of the Engineer.

All cavities between roof and ceiling are to be adequately ventilated.

11.0 ELECTRICAL INSTALLATIONS

1 SECTION 1: MATERIALS, WORKMANSHIP & INSTALLATION INSTRUCTIONS

1.1 REGULATIONS

The installations shall comply in their entirety with the requirements of the Government Electrical inspector of Guyana, and the current edition (including up to date amendments) of the Regulation for Electrical Installation issued by the Institution of Electrical Engineers of the United Kingdom.

The "Contractor" shall ensure that all tests to ascertain compliance with these regulations are carried out before the hand-over date.

1.2 ELECTRICAL SUPPLY

The electricity supply in Guyana is 60 HZ.

1.3 WORKMANSHIP

All workmanship shall be of the highest recognized standards, and in conformity with the code of practice, issued by the British standards Institution or internationally recognized equivalents.

1.4 DRAWINGS & SPECIFICATIONS

The drawings and specifications are complementary, and any discrepancy between them must be brought to the attention of the "Supervisory Consultant" for a decision. Failure to do so by the "Contractor" will result in a total cost to him for any rectification or replacement.

1.5 MATERIALS

All materials used, including those not specifically described shall be the best of their respective type, and of adequate size and strength, to ensure the mechanical and electrical soundness of the installation. Such detail being in the form of the manufacturers' literature, sketches, etc.

1.6 SETTING OUT

The "Contractor" shall be responsible for the accurate marking and setting out of the installation. The drawings indicate the proposed positions of the fittings and outlets, but the "contractor" must refer to the architectural and structural details, in order to ensure integration with the other services, building structure, ceiling tile arrangement, etc.

1.7 CUTTING AWAY, MAKING GOOD & TRENCHING

Cutting away, making good and trenching will not be a part of the "Contractor's" work. The "Contractor" shall identify and accurately locate all cutting away, trenching, and other builders' work and arrange for the execution.

1.8 (a) DESCRIPTION

The main supply shall comprise P.V.C. cables with copper conductors as sized and indicated on drawings.

(c) INSTALLATION

The cable shall be run in high impact P.V.C. conduit, sized as indicated on the drawing, and run at high (eaves) level from the main switch (provision been made for metering) in the building to the service entrance as indicated.

1.9 MAIN SWITCH

DESCRIPTION

This shall be as indicated on the appropriate drawing.

The switch shall be the H.R.C. fused type suitable for A.C. application and surface mounting. The enclosure shall be fabricated from rust proof material or material treated for application in a humid and high saline atmosphere.

The enclosure shall be fitted with locking facility; if padlock is to be used this must be provided.

INSTALLATION

The switch shall be installed, only where the distance between the supply cable entry and the main switch-gear exceeds twenty feet (20' – 0") and shall be secured to the building structure by no less than (4) four corrosion resistant screws and rawlplugs.

1.9 (a) MAIN SWITCH

Where this is the case, it shall be sited as instructed by the “Supervisory Consultant”, and positioned at a height of no less than eight feet (8’ – 0”) from floor level, and fixed by four # 12 x 11/4” brass or similar corrosion resistant screws with appropriately sized washers.

NOTE: On some sites, no supply lines of the Supply Authority existed at the time of the installation design.

1.10 METER

DESCRIPTION:

The meter shall be provided and installed by the Supply Authority.

INSTALLATION:

The “Contractor” shall build the meter circuit and make provision for the installation of the meter (provide meter board). The meter shall be sited and positioned as agreed by the Supply Authority and the Supervisory Consultant.

1.11 DISTRIBUTION BOARD

The board shall be the MCB type suitable for surface mounting. The enclosure shall be fabricated from corrosion resistant material or treated for use in a salt laden atmosphere.

The breakers shall operate at their rated capacity at a minimum of 30 C without derating and have a minimum 1 c of 10,000 A symmetrical on 240V.

INSTALLATION

The board shall be fixed to the building by no less than four (4) corrosion resistant screws, washers and rawlplugs.

The internal wiring shall be neatly arranged connections firmly made and the neutral wire fixed on the neutral bar in a position corresponding to that of the breaker controlling the circuit.

All distribution boards shall carry fixed indelible circuit charts to indicate the number and locations of lights or points (socket outlets) controlled by the breaker.

1.12 SUB-MAINS

DESCRIPTION:

The cables taking the supply from the main switch-gear to the distribution boards (panel).

Unless otherwise indicated, these shall be P.V.C. insulated, single core copper conductors, rated at no less than 500V, and sized as indicated on the drawings. The cables shall be red for the lines and black for the neutral or colour coded with P.V.C. tape at each termination.

INSTALLATION:

The cable shall not be knicked, brushed or in any way damaged, to permit the ingress of water to the conductor, which may lead to low conductor reading to earth.

1.13 CONDUIT & PIPING

DESCRIPTION:

Adequately sized, high impact P.V.C conduit shall be used for all high level runs within the buildings.

Water tight P.V.C. piping of adequate size, shall be used for all linking of the buildings and all below ground level.

INSTALLATION:

The conduit shall be installed in its entirety before cables are drawn in.

Inspection boxes, draw boxes, bend tees, etc., and shall be accessible for the purpose of withdrawal or addition of cables. All boxes in which underground conduit (pipe) are terminated must be positioned at 2' – 0" above finished floor level. All conduit (pipe) rising below ground, must run concealed in the wall, and all boxes in which such conduit (pipe) terminate, must be flushed, and the covers (lids) must be fixed with four screws, in order to minimize vandalism.

All conduit (pipe) run below ground must be permanently watertight, and be run at a depth of 18".

The number of cables drawn into any conduit shall exceed that given in table B5 and B6 of I.E.E. regulation (14th edition).

Conduit running below ground across open areas, shall be protected by 6" x 1" greenheart slab, and the route marked by 9" concrete cube partly buried cable marker at 20' – 0" intervals; on the top of the cable marker shall be inscribed "ELECTRIC CABLES".

1.14 CABLES

INSTALLATION:

The PVC/PVC/SWA cable shall be run from the switchgear to the distribution. The cable shall be run partly on the building structures and partly in free earth. Where the cable run in free earth, it must be laid on a 6" bed of sand 18" below ground and protected by cable tiles or equivalent material. Where the cable run on the building structure, it must be supported by straps, at no more than 4' 0" intervals.

The loop-in system of wiring shall be used in the installation of the PVC ECC cables, and joints would only be permitted when approved by the Engineer.

1.15 Light Emitting Diode (LED) Lamps and Fixtures

All LED light engines (combination of diodes, driver, heat sink, housing and optics), whether screw - in or hardwired, shall meet all of the following criteria:

- The rated driver input wattage and total number of LEDs shall be published by the manufacturer for each funded Fixture Unit (driver and LED combination) and shall be the same wattage used in the Fixture Counts Page of this Lighting Workbook.
- All equipment must have model - identification that is specific and clear enough to accurately match installed equipment with equipment submittals and specific product entries in the qualification lists referred to below.

•
1.16 SOCKET OUTLETS (POINTS)

DESCRIPTION:

13A Socket Outlet: This shall be the surface mounting type of non paneled wall and the flush type on paneled walls.

The outlet shall be ivory or white plated.

INSTALLATION:

The outlet box shall be mounted flush in the wall at a height of 12" centre from finished floor level and 6" centre from working tops and must be effectively earthed.

The outlet must be fixed to the box by no less than two (2) security screws.

NOTE: A minimum of four (4) screw drivers or appropriate tools for the screws must be provided and handed over to the Client at the completion of the project.

DESCRIPTION:

10/15A Socket Outlet.

These shall be the surface mounting type on non paneled walls and flush type on paneled walls.

The outlet shall be ivory or white plated. The receptacle for the outlet pins shall be oblong and parallel for line and neutral and semi-circular for the earth (North America type).

NOTE: The voltage supply to each outlet must be clearly and permanently marked on the wall (not on the outlet) adjacent to the outlet.

INSTALLATION:

Similar to that of the 13A sockets outlet.

1.17 SWITCHES (FOR LIGHT CONTROL)

DESCRIPTION:

These shall be suitable for use on A.C. circuits and for switching fluorescent fittings. They shall be the surface mounting for non-paneled walls and flush type for paneled walls.

Switches rated at no less than 5A shall be used on all 240V lighting circuits, and no less than 10A on all 110V lighting circuits.

INSTALLATION:

Unless otherwise instructed, all switches shall be positioned at a height of 4'6" centre from finished floor level, and 5" from the adjacent door jamb.

The Architect's drawing must be checked to ensure that the position of the switched is not in conflict with door swings, and other structural limitations.

1.18 EARTHING

The earth terminals of all socket outlets, and the mounting boxes shall be permanently and effectively connected to earth.

All exposed non-current carrying metal parts of fittings, electrical components; equipment and the steel frame of the building shall be effectively bonded to earth.

The earth loop impedance of all circuits shall be low enough to ensure the proper operation of all circuit breakers and fused in accordance with table 41A of I.E.E. Regulation 413-5.

The earth continuity conductor shall be of copper, adequately sized, and bonded to the earth electrode to ensure compliance with the regulations.

The earth electrode shall be $\frac{3}{4}$ " solid copper rod, or galvanized steel pipe of no less than 1" diameter, driven to a minimum of (8' - 0") eight feet into the ground.

Connection of the earth continuity conductor to the main switch and switch-gear shall be made of soldered or crimped lug, spring and flat washer and bolt and nut.

1.19 AIR CONDITIONING UNITS

SPLIT SYSTEM

Condensing Unit:

The condensing unit shall be the direct expansion type. The cabinet shall be constructed from galvanized coated steel and all metal parts and screws treated for external use in a salt laden atmosphere.

Removable panels to facilitate electrical and refrigerant maintenance shall be provided. The fan motors shall be totally enclosed type.

The compressor shall be the hermetically sealed type with temperature and current protection devices and the condenser coils shall be the copper tubes with mechanically bonded aluminum fins.

Air Handler: These shall be matched with the condensing unit and suited for wall and ceiling mounting.

The cabinet shall be fabricated from galvanized steel, treated and attractively finished off-white or similar attractive colour. The fan assembly shall be mounted on anti-vibration mounts for quiet operation.

Washable filters shall be provided for economical maintenance.

1.20 LABELLING

The Contractor shall supply and fix trifoliate or similar approved permanent tables, to indicate the function of all main switches and breakers on the main switch-gear and wherever the function of such items are not obvious.

Printed circuit lists shall be fixed on the inside covers of all distribution boards, to indicate the lights/points on the circuit and their location.

All labels shall be fixed to their respective positions before the hand-over date.

The following notice, of such durability, as would remain legible throughout the life of the installation, shall be fixed in a prominent position near the main switch-gear.

IMPORTANT

This installation shall be inspected every year, and a compliance certificate obtained from the Government electrical Inspector.

DATE OF THE LAST INSPECTION:

1.21 TESTING

The Contractor shall arrange for the installation to be inspected and tested by the Government Electrical Inspector and a certificate of compliance issued to the owner.

1.22 WARRANTY AND REPAIRS

The Contractor shall ensure that whenever possible, all items used are covered by the manufacturers’ warranty.

All faulty items replaced under the manufacturers’ warranty shall be at the Contractor’s cost.

Any breakdown in the installation, fault, or mal-functioning of any component of the installation, due to poor workmanship or non-adherence to the regulation, shall be promptly rectified by the Contractor, at no cost to the owner, for a period not exceeding twelve (12) months.

BASIC PRICE LIST
SCHEDULE OF BASIC RATES

1. Plant

The Contractor will state below the rate per hour to be charge for plant, when used on the day work. These rates are to include for all fuel, consumable store, repairs and replacement, but are not to include payments for drivers and attendants. These will charge for at the rate laid down for labour in the schedule for basic rates for unskilled labour.

The rates are also to cover for repairs, maintenance and all other cost and charges in connection with the use of plant on day works.

No allowance will be made for standing time. This schedule shall be deemed to be incorporated.

Description	Capacity	Rate
1. Concrete Mixer	8 Cu.Yd	_____
2. Poker Vibrator		_____
3. Plate Compactor		_____

4. Water Pump	1 H.P.	_____
5. Truck	10 Tons	_____
6. Excavator	5/8 Cu.yd	_____
7. Welding Plant	250V	_____
8. Generator	1500W	_____
9. Chop Saw	15 Amps	_____

2. Materials

	Description	Unit	Cost
1.	Cement	Sack	_____
2.	¾" minus Aggregate	Ton	_____
3.	White Sand	Ton	_____
4.	No. 65 BRC	Sq.yd	_____
5.	GH Timber	Bm	_____
6.	Hardwood	Bm	_____
7.	Form Board	Sq.Yd	_____
8.	4" Dia. Galvanized Pipe	Ft	_____
9.	2" Dia. Galvanized Pipe	Ft	_____
10.	Stainless Steel Razor Wire	Ft	_____
11.	5/8" Dia. HT Rebar	Lb	_____
12.	½" Dia. HT Rebar	Lb	_____
13.	3/8" Dia. Rebar	Lb	_____
14.	¼" Dia. Rebar	Lb	_____
15.	18 G Binding Wire	Lb	_____
16.	26 G Zinc Sheet	Sq.Yd	_____
17.	Oil Paint	Gal	_____
18.	Emulsion Paint	Gal	_____
19.	Anti-corrosive Paint	Gal	_____

3 Workers

The contractor is required to include the daily rates of pay for the under mentioned categories of workers. He can include a category of workers if it is not listed below or ignore a category if it is not applicable for these workers.

Categories	Rates
Foreman	_____
Bricklayers	_____
Carpenters	_____
Driver Lorry	_____
Excavator Operator	_____
Electrician	_____
Gutter smith	_____
Labourers	_____
Masons	_____
Painters	_____
Plumber	_____
Time Keepers	_____
Watch man	_____
Welders	_____

QUALIFICATION INFORMATION

1. For individual bidders or individual members of a partnership

1.1 Constitution and legal status of Bidder (attach copy).

License No. and its validity period to execute the Works:

_____ (attach copy)

Place of registration: _____

Principal kind of business: _____

Power of Attorney issued to signatory of the Bid: (attach).

1.2 Total volume of the Works executed for the last (2) two years in GYD:

1.3 Experience as a prime Contractor during the last two years. The value is indicated in GYD.

No.	Project name and location	Name of Purchasers and their telephone numbers	Items of Works and Year of Completion	Value of Contract

1.4 The availability of the following items of equipment to the Contractor is of substantial importance for the Works. The Bidder must respond to all request listed below:

Item of equipment	Model and year of production	Number of available items	Condition (new, good, poor)	Owned, rented (from whom?) to be purchased (from whom?)

1.5 Qualifications and experience of employees proposed for the key administrative and line positions in order to execute the Contract.

Position	Full Name	Years of experience	Years of experience at similar position
Manager			
Foreman			
Quality Inspector			

1.6 Main subcontractors (when required)

Nature of Works	Value of Subcontract	Subcontractor (name, address, telephone number)	Years of experience in carrying out similar works

1.7 Presence of tax debts, of payments to Social Fund (reply and attach supporting documents).

1.8 Information on current litigation (and recent – within past 2 years) in which the Bidder involved.

Other party (ies)	Cause of dispute	Disputed amounts

1.9 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.

1.10 Equipment availability must be supported by proof of ownership and or letter of commitment to lease.

2 For a partnership (syndicate)

2.1 Information specified in 1.1—1.8 shall be provided for each partner of the partnership (syndicate).

2.2 Information given 1.9 shall be provided by the partnership (syndicate).

2.3 Attach the power of attorney of the signatory (ies) of the Bid authorizing him or them to sign the bid on behalf of the partnership (syndicate).

2.4 Attach the Agreement between the partners of the partnership (syndicate) (to be binding on all partners) which shows that:

- (a) all partners shall be jointly or severally liable for execution of the Contract in accordance with the Contract conditions;
- (b) one of the partners shall be nominated as being in charge authorized to incur liabilities, and receive instructions on behalf of any or all partners of the partnership (syndicate); and
- (c) the execution of the entire Contract, including payment shall be done exclusively by the partner in charge.

I certify the authenticity of all the above information.

(Full Name)

(Position)

(Signature and Seal)

Dated on « _____ » day of _____ 20_

Form

CONTRACTOR'S BID

Date:
IFB No:

TO:

(Name and address of Employer)

Having examined the bidding documents including Annexes and Addenda No _____ [specify numbers], the receipt of which is hereby acknowledged, we offer to execute _____ [description of works] in accordance with the Contract conditions attached herein for the total amount of _____, _____ GYD [*the Total Amount of Bid in Words and Figures*].

Alternative bids (at the Employer's request):

Also we offer to execute the works pursuant to alternative bids for the amount of _____ GYD,

(add or reduce to basic bid price)

and we declare that:

- (a) We, including all subcontractors, regarding any part of the Contract, in accordance with these bidding documents, have no conflict of interests pursuant to sub-clause 3 (i) of the Instruction to Bidders;
- (b) We, including all subcontractors, regarding any part of the Contract, in accordance with these bidding documents, have not been declared by the [National Procurement and Tender Administration] to be ineligible, or are not ineligible pursuant to laws of Guyana.

If our Bid is accepted, we shall furnish the Performance Security for the amount of _____ in order to execute the Contract properly and within the dates specified in the bidding documents.

If our bid is accepted we request advance payment in the amount of [...] thousand GYD for proper performance of the contract. From our part, we undertake to furnish a bank guarantee for the advance payment in the above amount.

We hereby confirm that this bid shall be valid within _____ days of the date established from the bid opening date, and it shall remain binding on before the expiry of indicated period. Prior to preparation and execution of a formal Contract, this Bid together with your written confirmation of its acceptance shall be equivalent to conclusion of a Contract to be binding upon both parties.

We understand that you are not required to accept the lowest or any bid you receive.

Dated the _____ day of _____ 20 __

Duly authorized to sign the Bid for and on behalf of _____(name of Contractor)

(Full Name)

(Title)

(Signature and Seal)

Form

CONTRACT

This Contract made the _____ day of _____ 20__
(Date) *(Month)*

BETWEEN the Employer (name and address of organization)

and the Contractor (name and address of organization)

for the (Name of Contract)

In view of that the Employer wishes to have the Contractor execute _____
(Name of contract)

(hereinafter called the Works) and the Employer has accepted the Contractor' Bid for the execution and completion of the Works, and for correction of any defects therein.

THIS CONTRACT WITNESSES the following:

1. The words and expressions in this Contract have the same meanings as they do in the General Conditions of Contract.
2. Below listed documents shall form this Contract and shall be deemed the integral part of it, namely:
 1. Contract,
 2. Letter of Acceptance,
 3. Contractor's Bid,
 4. Special Conditions of Contract,
 5. General Conditions of Contract,
 6. Technical Specifications,
 7. Drawings,
 8. Priced Bill of Quantities, and priced Consumable Materials; and,
 9. Other documents included in the Contract Documents:

(specify additional documents which the Purchaser is intended to include in the Contract Documents according to the General Conditions of Contract)

3. Taking into account the payments to be made by the Employer to the Contractor in accordance with the above-stated, the Contractor shall enter into the Contract with the Purchaser to execute and complete the Works, and to correct any defect therein in full accordance with conditions of the Contract.
4. The Purchaser shall pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects wherein 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.

For and on behalf of the Procuring Entity:

Signed by _____

Witnesses:

1. _____

2. _____

For and on behalf of the Contractor:

Signed by _____

Witnesses:

1. _____

2. _____

Contract No:	Dated:
Purchaser(<i>name of organization</i>):	
Contractor(<i>name of organization</i>):	
Amount of Work order GYD:	
Agreed(<i>signature of the person agreed with Work order</i>):	
Date of agreement:	

WORK ORDER No. ___

(to be made up by the Purchaser for any change against decrease or increase of items of works)

No	Name of item and consumable materials	Unit	Quantity	Unit price in Bill of Quantities	Unit price offered	Value of change	Contractual value	Amount of increase (+) decrease (-)
I	Use of unit prices							
II	Consumable materials							

Signature of Contractor _____

Signature of Engineer _____

Form
Bid Security
(Bank guarantee)

Whereas _____ [name of Bidder] (hereinafter called "the Bidder") is ready to submit his bid dated [date of bid submission] for the execution of [description of works] (hereinafter called "the Bid"),

KNOW ALL PEOPLE that WE _____ [name of bank] from _____ [name of country] having our registered office at the address _____ [address of bank], (hereinafter called "the Bank"), are bound to _____ [name of Employer] (hereinafter called "the Employer") for the amount of _____ by which the payment shall be made in whole and on time to the indicated Purchaser; and the Bank is bound with these obligations on behalf of its name, its successors and authorized. This is to confirm that the license issued to the Bank shall provide for activity on issuance of the security, and the person (s) signing this security is entitled to act on behalf of the Bank, and if the approval of Board of Directors, or of General Stockholders Meeting is required, then it is already received, and there is no other approval required.

THE CONDITIONS of this obligation are as follows:

1. If the Bidder:
 - (a) withdraws his Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
 - (b) rejects the adjustment of bid price pursuant to Clause 27.

2. If the Bidder, having received a notice of that his Bid is accepted by the Employer, during the validity period of that bid:
 - (a) fails or rejects to sign the Contract, at the request; or
 - (b) fails or rejects to furnish the Performance Security in accordance with the Instructions to Bidders;

We undertake to pay the Employer the above sum upon receipt of his first written request, without needing the Employer to show grounds or reasons of that request, provided that the sum requested by the Purchaser is due to him because of the occurrence of one or both conditions, specifying the condition (s) occurred.

This security shall remain valid during _____ days inclusive following the expiry of the Bid validity period, and any request in respect thereof should reach the Bank not later than the above date.

(Full name of Bank's representative) (Title) (Signature and seal)

Dated on ___ day of _____ 20__
Address of the Bank issued the guarantee: _____

Form
Performance Security
(Bank guarantee)

TO: _____
[Name of Employer]

WHEREAS _____ *[name of Contractor]*
(hereinafter called "the Contractor") has undertaken in pursuance of the Contract N *[Contract number]* dated _____ 20 __ to execute the Works *[description of works]* (hereinafter called "the Contract"),

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish You with a bank guarantee by a reputable bank for the sum specified therein as a security for compliance with the Contractor's obligations under the Contract;

AND WHEREAS we have agreed to furnish the Employer with a security,

THEREFORE WE hereby confirm that we are the Guarantors and are responsible to you on behalf of the Contractor up to a total of _____ *[Amount of Security in words and figures]* and, we undertake to pay You on your first request notifying of the Contractor's default with the Contract, and without cavil or argument, any sum or sums within the above limits, and as aforesaid, without your needing to show grounds or reasons of your request or the sum specified therein.

Any modification or addition, or amendment in the terms of Contract which may be made by the Employer and the Contractor by Additional Agreement shall in no way release us from obligations under the Guarantee, and we waive any notice of modification, addition, or amendment. This guarantee shall be valid until full completion by the Contractor of the Contract Conditions. Also, we confirm that the license issued to the Bank shall provide for activity on issuance of a bank guarantee, and the person signing the guarantee is entitled to act on behalf of the Bank, and if the approval of Board of Directors or of General Stockholders Meeting is required, then it is already received, and there is no other approval required.

This guarantee shall expire no later than twenty-eight days from the date of issuance of the Taking-Over Certificate, which shall be provided to us, or on the *[insert number day of [insert month], [insert year]*, whichever occurs first. Consequently, any demand for payment under this guarantee must be received by us at this office before that date.

(Full name of Bank's representative) _____ *(Title)* _____ *(Signature and seal)*

Dated on ___ day of _____ 20 __
Address of the Bank issued the guarantee: _____

Bank Guarantee for Advance Payment

TO _____
[Name Employer]

[Name of Contract] _____

We, _____ [name of Bank] in accordance with the conditions of Contract which provide for advance payment (name and address of the Contractor), and whereas the Contractor has undertaken to provide you a Bank guarantee for advance payment to the Employer.

THEREFORE WE hereby affirm that we are the Guarantors, and are responsible to you on behalf of the Contractor to a total sum _____ GYD (amount of guarantee in figures and words), and we undertake to pay you on you first request and without objection on our part, and without the preliminary address to the Contractor, any sum or sums within the above limits.

We also agree that no alteration or addition in the terms of Contract which is subject to implementation, or any other contract documents which may be made by the Purchaser and the Contractor shall release us from obligations under the guarantee, and we hereby waive any notice of such alteration, or addition. We confirm that the license issued to the Bank shall provide for activity on issuance of a bank guarantee, and the person signing the guarantee is entitled to act on behalf of the Bank, and if the approval of Board of Directors or of General Stockholders Meeting is required, then it is already received, and there is no other approval required.

This guarantee shall be valid and remain in force from the date of advance payment received by the Contractor under the Contract, and until the date when the Employer receives a full compensation of the relevant amount of Advance Payment.

The Advance Payment referred to above must be received by the Contractor in its account number _____ [insert account number] at _____ [insert name and address of 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 _____ [insert date], whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

(Full name of Bank's representative) (Title) (Signature and seal)

Dated on ___ day of _____ 20__

Address of the Bank issued the guarantee: _____

Form

Letter of Acceptance

(letterhead paper of Employer)

_____ (date)

To: _____

(Name of Contractor)

(Address of Contractor)

This is to notify you that your bid dated the ____ day of _____20__, for the execution of _____ (description of works) to the total sum of _____

(Amount in Figures and Words) as amended and modified in accordance with the Instructions to Bidders is hereby accepted by our organization.

At the same time, we are sending you the Form of Contract and requesting you, in accordance with Clause 32.2 of the Instruction to Bidders, during 7 (seven) days to sign and date the Form of

Contract, and return it at our address. Along with the signed Contract, we request you to furnish us, pursuant to ITB Clause 33, with the Performance Security.

You hereby instructed to start the Works pursuant to the Contract conditions.

Name of organization _____

Full name and Title _____

Signature of Authorized Representative _____

Annex: the Contract

Form

Power of attorney

TO: *[name of Employer]*

WHEREAS _____ *[name of Contractor]*, who is the Contractor for the execution of Works *[description of works]*. do hereby authorize _____ *[name and address of Contractor's Representative]* to submit the Bid, and subsequently negotiate with you, and sign the Contract based on the Invitation for Bids which we hereby extend our full guarantees for the execution of Works based the Invitation for Bids.

[Full name, title, signature for and on behalf of Contractor]

Dated on _____ day of _____ 20____
(Date) *(Seal)*

Note: The power of attorney must be drafted on a letterhead paper of the Contractor, and signed by a competent person authorized by the Contractor. The Bidder shall include the power of attorney in its Bid.

EVALUATION CRITERIA		
NONFINANCIAL ASSESSMENT	Administrative Compliance	RESPONSIVE (Yes/No)
1	Submission of Valid Company Registration	Yes
	Submission of Valid Certificate of Compliance - GRA	Yes
	Submission of Valid Certificate of Compliances - NIS	Yes
	Completion of Form of Tender (signed)	Yes
	Detailed Work Programme	Yes
	Audited Financial Statement	Yes
	Method Statement	Yes
	Record of Past Experience or Similar Works	Yes
	List of Equipment Proposed for the Project	Yes
	List Qualification & Experience of Key Personnel	Yes
	List of matters of Litigation	Yes
	Completion of Schedule of Basic Price List	Yes
	Completed Priced Bill of Quantities	Yes
	MAIN EQUIPMENT	Total Points 30
2	Excavator	6
	Concrete Mixer	5
	Plate Compactor	4
	Poker Vibrator	4
	Dump Truck	4
	Welding Plant	4
	Assorted Power Tools (Saw, drill, etc)	3
	EQUIPMENT	Total Points 10
3	Own	10
	Rent	5
	KEY PERSONNEL	Total Points 20
4	Engineer – Experience > 10 yrs	13
	Engineer – Experience > 3 yrs	7
	Foreman – Experience > 10 yrs	7
	Foreman – Experience > 3 yrs	3
	PERFORMANCE RECORD	Total Points 30
5	For 10 or more projects of similar nature	30
	For 5 or more projects of similar nature	20

	For 3 or more projects of similar nature	5
	OUTSTANDING PROJECTS BEING UNDERTAKEN	Total Points 10
6	0 Project	10
	1-2 Projects	7
	3-4 Projects	5
	TOTAL MAXIMUM POINTS	100

FINANCIAL ASSESSMENT

- (a) *Tender Corrections: All responsive bidders are checked for arithmetical and other errors in accordance with ITB Clause 28.1 to show corrected and original sum.*

- (b) *A Bidder must have at least 70 % as a minimum requirement and at least 50% of the points in each category of the Non- Financial Assessment (Items 2-7) before being considered for Financial Assessment.*

NOTES ON EVALUATION

- (a) *The Contract would be awarded to the Bidder whose bid is determined to be substantially Responsive to the Bid Document and who has offered the lowest evaluated Bid Price*

A penalty of immediate rejection of a bid or termination of contract will be applied upon discovery of misrepresentation of information