

Contract #205-2019/20



GOVERNMENT OF BELIZE  
MINISTRY OF WORKS  
BELMOPAN

## CARACOL ROAD UPGRADING PROJECT

### LOT 1A

SANTA ELENA TO TRIPARTITE JUNCTION  
AND  
GEORGEVILLE TO TRIPARTITE JUNCTION

### CONTRACT DOCUMENTS

### VOLUME I

FINANCED BY:

OFID (OPEC FUND FOR INTERNATIONAL DEVELOPMENT)

DECEMBER 2019

Ref: Solicitor General: LEM/3/01/19 (40) dated 22 October 2019

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**CONTRACT AGREEMENT**

## CONTRACT AGREEMENT

THIS AGREEMENT made the 2<sup>nd</sup> day of DECEMBER 2019 between the Ministry of Works, Power Lane, Belmopan (hereinafter "the Employer"), of the one part, and Belize Roadway Construction Ltd., Entrepreneur Road, Belmopan, BELIZE (hereinafter "the Contractor"), of the other part.

WHEREAS the Employer desires that the Works known as Caracol Road Upgrading Project - Lot 1A (Santa Elena to Tripartite Junction and Georgeville to Tripartite Junction) should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein.

The Employer and the Contractor agree as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
  - (i) the Letter of Acceptance
  - (ii) the Letter of Bid
  - (iii) the Particular Conditions
  - (iv) the General Conditions
  - (v) the Specification
  - (vi) the Drawings; and
  - (vii) the completed Schedules
3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price of Bz\$37,988,176.55 (Thirty-Seven Million Nine Hundred Eighty-Eight Thousand One Hundred Seventy-Six Dollars and Fifty-Five Cents) or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

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

Signed by:

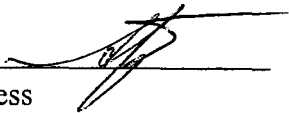


TIMMY BANMAN  
Belize Roadway Construction Ltd.



For and on behalf of the  
Contractor

Witness



Signed by:



HON. RENE MONTERO  
Minister of Works



For and on behalf of the  
Employer

Witness



Errol Gentle  
Chief Executive Officer  
Ministry of Works

**Table 1: Read Out Prices for Lot 1A and Lot 1B**

| Contractor                          | Lot 1A \$ Bz  | Lot 1B \$ Bz  |
|-------------------------------------|---------------|---------------|
| A&N Construction Ltd.               | 42,597,995.35 | 13,678,920.83 |
| Belize Roadway Construction Ltd.    | 36,633,336.25 | 13,942,435.93 |
| Cisco Construction Ltd.             | 44,356,947.80 | 14,207,310.15 |
| Imer Hernandez Development Co. Ltd. | 47,699,991.90 | 19,489,741.48 |
| Teichroeb & Sons Ltd.               | 45,840,963.96 | -----         |

The bid security checked for each of the bidder submitted offers for each Lot and found to be incompliance with the bidding documents. As per the bid opening minutes of meeting the employer has handed over all the submitted bids to NARCO as the appointed consultants for supervision of the project's construction, as per the signed contract between the Employer and the Consultant.

#### 11. MISSING BILL OF QUANTITY INFORMATION

Upon evaluating the bids, it has been noticed that Contractor Teichroeb & Sons Ltd. did not insert the detail of Bill 5 of Lot 1A of the part George Ville – Tripartite Junction – San Antonio.

In the Summery Sheet Bill No. 5 is Added as Bz \$ 6,724,155.00, but the detail of this bill is not included in the bidding Document.

#### 12. ARITHMETIC CHECK FOR BILL OF QUANTITIES FOR LOT 1A

The bids checked for arithmetic errors. The following errors noted and corrected in the bills. Consultant estimate for the bill of quantities together with the 5 contractors are all shown in **Annexure 8**. Contractors mistake are shown below, and they are highlighted in yellow in the bill of quantities.

- ✓ A&N Construction: Lot 1 Contract 1A, item No. 1.6(b) (i) and 1.6 (b) (ii), The Contractor did not price these two items. The Consultant price prevail Add (+20,000.00)
- ✓ A&N Construction: Lot 1 Contract 1A, item No. 1.10 d (George Ville – Tripartite Junction, the Contractor did not price this item. The Consultant price prevail Add (+ 800.00)
- ✓ A&N Construction: Lot 1 Contract 1A, item No. 1.10 e (George Ville – Tripartite Junction, the Contractor did not price this item. The Consultant price prevail Add (+ 800.00)

- ✓ A&N Construction: Lot 1 Contract 1A, item No. 4.6 (c.) the quantity of this item is 1993 m. the contractor inserted the quantity of 1933 m. Add (+ 13,902.00)
  - ✓ A&N Construction: Lot 1 Contract 1A, item no. 7.3. the subtotal of this item inserted as 41,123.00 this number is corrected as subtotal 125,508.60 Add (+ 84,385.60)
  - ✓ A&N Construction: Lot 1 Contract 1A, item No. 5.9 (a) the quantity of this item is 104.4 m2 the contractor inserted the quantity of 104 m. Add (+ 36.55)
  - ✓ A&N Construction: Lot 1 Contract 1A, Bill no. 8 Day works. The contractor inserted the total amount of this bill as 164,335.98. the addition of this bill is done wrongly, the total of Bill no. 8 is 248,721.58 Add (+ 84,385.60)
  - ✓ A&N Construction: Lot 1 Contract 1A, summery sheet. The contractor inserted bill no. 1 (preliminary) twice. That means the amount of 3,493,000.00 inserted in the total cost twice Omit (-3,493,000.00)
- Total addition and omission Bz\$ (-3,288,690.25) without adding the contingency.**

**The new contractor price after the contingency is Bz\$ (38,980,408.67)**

- ✓ Belize Roadway Construction: Lot 1 Contract 1A, item No. 1.9 (b) Provisional Sum is \$45,000.00. Contractor inserted 30,000.00 Add (+ 15,000.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1A, item No. 1.9 (c) Provisional Sum is \$15,000.00. Contractor inserted 10,000.00 Add (+ 5,000.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1A, item No. 1.9 (d) Provisional Sum is \$1,050,000.00. Contractor inserted 550,000.00 Add (+ 500,000.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1A, item No. 1.11 Provisional Sum is \$30,000.00. Contractor inserted 15,000.00 Add (+ 15,000.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1A item No. 4.10 the contractor changes the description of the item + change from Meter to unit price. Consultant price prevailed Add (+ 243,992.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1A, item No. 6.6 the contractor added the amount of 80,000.00 for not required and not specified item. Omit (- 80,000.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1A item No. 2.5 Cut to Fill, the consultant estimate for this item is 135,500 m3, the contractor inserted the quantity of 130,275 m3 Add (+ 73,150.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1A, item No. 5.10 (c) Concrete Slab, consultant estimate for this item is 32.80 m2, the contractor inserted the quantity of 33 m2 Omit (- 40.00)

- ✓ Belize Roadway Construction: Lot 1 Contract 1A, item No. 6.1 (k) Road Paint, contractor did not price this item. The consultant price prevail Add (+ 48,000.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1A, summery sheet. The contractor did not add bill no. 7 in the sub total addition. Add (+ 411,521.00)

**Total addition and omission Bz\$ (+ 1,231,623.00) without adding the contingency.**

**The new contractor price after the contingency is Bz\$ (37,988,176.55)**

- ✓ Cisco Construction: Lot 1 Contract 1A item No. 1.9 (b) Provisional Sum is \$45,000.00. Contractor inserted 45,000.00 + 8,000.00 Omit (- 8,000.00)
- ✓ Cisco Construction: Lot 1 Contract 1A, Bill No.4. the contractor made a mistake by adding the component of this bill with an extra 50,000.00 Omit (- 50,000.00)
- ✓ Cisco Construction: Summery sheet. The contractor added the preliminary of 4,938,000.00 twice Omit (- 4,938,000.00)

**Total omission Bz\$ (- 4,996,000.00) without adding the contingency.**

**The new contractor price after the contingency is Bz\$ (38,861,347.80)**

- ✓ Imer Hernandez Development: Lot 1 Contract 1A, item No. 2.2 Topsoil Stripping, Consultant estimate for this item is 22,000 m3. The contractor inserted the wrong quantity of 220,000 m3 Omit (- 495,000.00)
- ✓ Imer Hernandez Development: Lot 1 Contract 1A, item No. 5.10 (c.) Concrete Slab, Consultant estimate for this item is 32.8 m2. The contractor inserted the wrong quantity of 33 m2 Omit (- 40.00)
- ✓ Imer Hernandez Development: Lot 1 Contract 1A, item No. 8.2.20 Day Work, Contractor inserted the wrong amount of 20,400.00 it should be 26,100.00 Add (+ 5,700.00)

**Total addition and omission Bz\$ (- 489,340.00) without adding the contingency.**

**The new contractor price after the contingency is Bz\$ (47,047,038.50)**

- ✓ Teichroeb & Sons: Lot 1 Contract 1A, item No. 7 Day Work, Contractor did not price the items from 7.3.1 to 7.3.43. consultant rate prevails Add (+ 111,950.00)
- ✓ Teichroeb & Sons: Lot 1 Contract 1A, item No. 4.18 (d) Kerbs and Channels, Contractor did not insert the total amount for this item Add (+ 275,000.00)
- ✓ Teichroeb & Sons: Lot 1 Contract 1A, item No. 5.10 (c.) Concrete Slab, Consultant estimate for this item is 32.8 m2. The contractor inserted the wrong quantity of 33 m2. Omit (- 50.000)



**LETTER OF ACCEPTANCE**

BELIZE



Ministry of Works

Please Quote  
No: PEU/UCRP/GEN/19 (65)

16<sup>th</sup> October, 2019

**Belize Roadway Construction Ltd.**  
Entrepreneur Road  
Belmopan  
BELIZE C.A.

Phone No: 822 – 2076  
E-mail: office@belizeroadway.bz

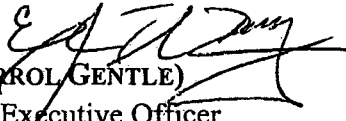
Dear Mr. Banman:

**SUBJECT: UPGRADING OF CARACOL ROAD PROJECT**  
**LOT 1A – SANTA ELENA - TRIPARTITE JUNCTION - GEORGEVILLE**

The Ministry is pleased to inform you that your Financial Offer submitted in connection with the Upgrading of Caracol Road Project Lot1A – Santa Elena – Tripartite Junction – Georgeville was accepted for the amount of **Bz\$37,988,176.55**

As soon as the contract document becomes available you will be invited for the Contract signing.

Sincerely,

  
(ERROL GENTLE)  
Chief Executive Officer  
MINISTRY OF WORKS

**CONTRACTOR'S FINANCIAL OFFER**

June 26, 2019

Mr. Errol Gentle  
Chief Executive Officer  
Ministry of Works  
Lane  
Belmopan,  
BELIZE

**Letter of Bid – Upgrading of Caracol Road Project – Lot 1A**

Dear Mr. Gentle,

We, the undersigned declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) Clause 8;
- (b) We offer to execute in conformity with the Bidding Documents the following works:  
**Upgrading of Caracol Road Project – Lot 1 A**
- (c) The total price of our Bid, excluding any discounts offered in item (d) below is: **Thirty Six Million, Six Hundred Thirty Three Thousand, Three Hundred Thirty Six Belize Dollars and Twenty Five Cents, (Bz\$ 36,633,336.25)**
- (d) The discounts and the methodology of their application is: **NONE**;
- (e) Our bid shall be valid for a period of days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document;
- (g) We, including any subcontractors or suppliers for any part of the Contract, have or will have nationalities from eligible countries in accordance with ITB 4.2;
- (h) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3
- (i) We are not participating, as a Bidder or as a sub-contractor, in more than one bid in the bidding process in accordance with ITB 4.3, other than alternative offers submitted in accordance with ITB 13;

- (j) We, including any subcontractors or suppliers for any part of the contract, has not been declared ineligible by the Fund, or under the Employer's country laws, official regulations or by an act of compliance with a decision of the United Nations Security Council;
- (k) We are not a government owned entity;
- (l) We have paid, or will pay the following commissions, gratuities or fees with respect to the bidding process or execution of the Contract:

| Name of Recipient | Address | Reason | Amount |
|-------------------|---------|--------|--------|
| <i>NONE</i>       |         |        |        |

- (m) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (n) We understand that you are not bound to accept the lowest the lowest evaluated bid or any other bid that you may receive; and
- (o) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Name: Timmy Banman

In the capacity of: Project Manager

Signed:  \_\_\_\_\_

Duly authorized to sign the Bid for and on behalf of: Belize Roadway Construction Ltd.

Dated on: June 26, 2019



**Belize Roadway Construction Ltd.**

PO BOX 351, Entrepreneur Road  
Belmopan, Cayo District, Belize

Tel: 501.822.2076  
Cell: 501.610.2633  
E-mail: office@belizeroadway.bz

June 25, 2019

**POWER OF ATTORNEY**

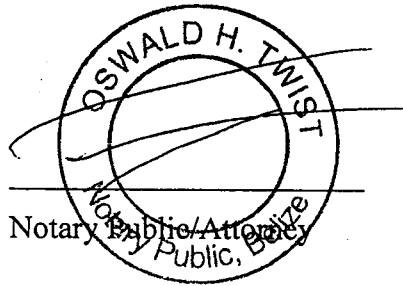
Dear Sir/Madam,

We the Directors of Belize Roadway Construction Ltd. namely; Jacob Banman, Carl Banman and Timmy Banman, hereby certify that we are the appointed directors of Belize Roadway Construction Ltd, a legally registered and incorporated company in Belize. We hereby authorize Mr. Timmy Banman, a director/partner in the company to legally sign on behalf of the company all documents and correspondences pertaining to Belize Roadway Construction Ltd.

Jacob Banman

Carl Banman

Timmy Banman



**CARACOL ROAD UPGRADE PROJECT**  
**LOT 1, CONSTRUCT 1A**  
**BILL OF QUANTITIES**  
**Bill No. 1 - PRELIMINARY AND GENERAL**

| Item | Description   | Unit  | Quantity | Rate          | Amount        |
|------|---|---|----------|---------------|---------------|
| 1.1  | Complete Establishment of Contractors Camp and maintenance of same.   | LS  | 1        | \$ 150,000.00 | \$ 150,000.00 |
| 1.2  | Accommodation, Services, and Attendance for the Engineer's Staff  |   |          |               |               |
|      | (a) Office building complete as specified including furniture, equipment and supplies.  | LS  | 1        | \$ 240,000.00 | \$ 240,000.00 |
|      | (b) Laboratory building complete as specified including furniture, equipment and supplies   | LS  | 1        | \$ 260,000.00 | \$ 260,000.00 |
|      | (c) Maintain Engineers site office and laboratory   | Mon   | 30       | \$ 3,000.00   | \$ 90,000.00  |
| 1.3  | Supply Engineer's Vehicles  |   |          |               |               |
|      | (a) Provide Vehicle Type A  | No  | 1        | \$ 110,000.00 | \$ 110,000.00 |
|      | (b) Provide Vehicle Type B  | No  | 2        | \$ 90,000.00  | \$ 180,000.00 |
|      | (c) Provide licensing, insurance, repairs, maintenance and operating cost for each of the three vehicles for the contract duration. | Veh Mon   | 90       | \$ 3,590.00   | \$ 323,100.00 |
| 1.4  | Building, House Type, Complete, as Specified, Including Fixtures, Furniture and Equipment   |   |          |               |               |
|      | (a) Type A House  | LS  | 2        | \$ 200,000.00 | \$ 400,000.00 |
|      | (b) Type B House  | LS  | 1        | \$ 125,000.00 | \$ 125,000.00 |
| 1.5  | Traffic flow control, watching and lighting and construction and maintenance of temporary diversions.                               | Mon   | 30       | \$ 4,500.00   | \$ 135,000.00 |
| 1.6  | Survey and Set Out  |   |          |               |               |
|      | (a) Set out of the works  | Incorporated in the rates as noted in Bill of Quantities Preamble clause 7.1.7 (iii). |          |               |               |
|      | (bi) Topographical survey of the George Price Highway intersection with Chiquibul Road. (Provisional Item)                          | LS  | 1        | \$ 7,500.00   | \$ 7,500.00   |
|      | (bii) Topographical survey of the George Price Highway intersection with Cristo Rey Road. (Provisional Item)                        | LS  | 1        | \$ 7,500.00   | \$ 7,500.00   |
| 1.7  | Provision of the Quality Control Plan detailing all quality assurance and testing requirements.                                     | LS  | 1        | \$ 10,000.00  | \$ 10,000.00  |

**CARACOL ROAD UPGRADE PROJECT**  
**LOT 1, CONSTRUCT 1A**  
**BILL OF QUANTITIES**  
**Bill No. 1 - PRELIMINARY AND GENERAL**

| Item | Description  | Unit | Quantity | Rate          | Amount        |
|------|--|------|----------|---------------|---------------|
| 1.8  | Provision of Environmental Protection and Mitigation Measures  | Mon  | 30       | \$ 2,500.00   | \$ 75,000.00  |
| 1.9  | Services   |      |          |               |               |
|      | (a) Service Authority Liason   | LS   | 1        | \$ 20,000.00  | \$ 20,000.00  |
|      | (b) Provisional Sum allowance of \$30,000.00 for the location, pot hole and survey of existing watermains within the extent of works.                | PS   | 1        | \$ 30,000.00  | \$ 30,000.00  |
|      | (c) Provisional Sum allowance of \$10,000.00 for the protection of existing services.  | PS   | 1        | \$ 10,000.00  | \$ 10,000.00  |
|      | (d) Provisional Sum allowance of \$550,000.00 for the relocation of existing utility poles.  | PS   | 1        | \$ 550,000.00 | \$ 550,000.00 |
| 1.10 | Pavement Investigations  |      |          |               |               |
|      | Undertake pavement investigation works as specified under clause A.21(b) of the Preliminary Specification, or as otherwise directed by the Engineer. |      |          |               |               |
|      | (a) Undertake test pits in Santa Elena, Cristo Rey and San Antonio Villages.   | No   | 17       | \$ 1,250.00   | \$ 21,250.00  |
|      | (a) Undertake test pits in Georgeville Village   | No   | 2        | \$ 1,250.00   | \$ 2,500.00   |
|      | (b) Undertake dynamic cone penetrometer tests in each test pit. Santa Elena - Tripartite   | No   | 17       | \$ 1,700.00   | \$ 28,900.00  |
|      | (b) Undertake dynamic cone penetrometer tests in each test pit. Georgeville - Tripartite   | No   | 2        | \$ 1,700.00   | \$ 3,400.00   |
|      | (c) Undertake partical size analysis for each pavement layer material identified in each test pit. (Provisional Item) Santa Elena - Tripartite       | No   | 34       | \$ 300.00     | \$ 10,200.00  |
|      | (c) Undertake partical size analysis for each pavement layer material identified in each test pit. (Provisional Item) Georgeville - Tripartite       | No   | 4        | \$ 300.00     | \$ 1,200.00   |
|      | (d) Undertake California Bearing Ratio testing for each pavement layer material identified. (Provisional Item) Santa Elena - Tripartite              | No   | 34       | \$ 375.00     | \$ 12,750.00  |
|      | (d) Undertake California Bearing Ratio testing for each pavement layer material identified. (Provisional Item) Georgeville - Tripartite              | No   | 4        | \$ 375.00     | \$ 1,500.00   |
|      | (e) Undertake liquid limit and plastic limit testing for each pavement layer material identified. (Provisional Item) Santa Elena - Tripartite        | No   | 34       | \$ 375.00     | \$ 12,750.00  |
|      | (e) Undertake liquid limit and plastic limit testing for each pavement layer material identified. (Provisional Item) Georgeville - Tripartite        | No   | 4        | \$ 375.00     | \$ 1,500.00   |



**CARACOL ROAD UPGRADE PROJECT**  
**LOT 1, CONSTRACT 1A**  
**BILL OF QUANTITIES**  
**Bill No. 1 - PRELIMINARY AND GENERAL**

| Item                    | Description   | Unit | Quantity | Rate          | Amount                 |
|-------------------------|---|------|----------|---------------|------------------------|
| 1.11                    | Provisional Sum allowance of \$15,000.00 for project information signs. | PS   | 1        | \$ 15,000.00  | \$ 15,000.00           |
| 1.12                    | Insurances  | LS   | 1        | \$ 600,000.00 | \$ 600,000.00          |
| 1.13                    | Performance Bond  | LS   | 1        | \$ 400,000.00 | \$ 400,000.00          |
| <b>TOTAL BILL No. 1</b> |   |      |          |               | <b>\$ 3,834,050.00</b> |

**CARACOL ROAD UPGRADE PROJECT**  
**LOT 1, CONSTRUCT 1A**  
**BILL OF QUANTITIES**  
 Bill No. 2 - EARTHWORKS

| Item | Description   | Unit | Quantity | Rate        | Amount        |
|------|---|------|----------|-------------|---------------|
| 2.1  | SITE CLEARANCE<br>Clear the site of works of all vegetation, debris and deleterious material. All material to be removed from the site becoming the property of the Contractor on leaving the site. | LS   | 1        | \$50,500.00 | \$ 50,500.00  |
| 2.2  | TOPSOIL STRIPPING<br>Strip topsoil from the Site of Works and dispose of clear of the works becoming the property of the contractor on leaving the site.  | m3   | 22,000   | \$ 10.00    | \$ 220,000.00 |
| 2.3  | UNDERCUTTING<br>(a) Undercut material below topsoil strip level in fill areas and remove to dump areas (Provisional Item)   | m3   | 3,000    | \$ 10.00    | \$ 30,000.00  |
|      | (b) Undercut material below subgrade level in cut areas and remove to dump areas. (Provisional Item)  | m3   | 14,000   | \$ 10.00    | \$ 140,000.00 |
| 2.4  | HARDFILL<br>Supply, transport, place and compact hardfill in undercut areas as directed by the Engineer. (Provisional Item)   | m3   | 5,000    | \$ 60.00    | \$ 300,000.00 |
| 2.5  | CUT TO FILL<br>Excavate in all materials met, haul, place and compact material in fill embankments including undercut areas as directed. (Provisional Item)   |      |          |             |               |
|      | (a) 0+000 To 5+968 (San Antonio to Tripartite)  | m3   | 24,000   | \$ 14.00    | \$ 336,000.00 |
|      | (b) 0+000 To 6+106 (Santa Elena to Cristo Rey)  | m3   | 38,000   | \$ 14.00    | \$ 532,000.00 |
| 2.6  | BORROW TO FILL<br>Source area for borrow, excavate, load, transport, place and compact borrow material in embankments and undercut areas (measured in borrow).                                      |      |          |             |               |
|      | (a) 0 to 5 km   | m3   | 2,000    | \$ 17.00    | \$ 34,000.00  |
|      | (b) 5 to 10 km  | m3   | 1,500    | \$ 23.00    | \$ 34,500.00  |
|      | (c) 10 to 15 km   | m3   | 1,500    | \$ 27.00    | \$ 40,500.00  |
| 2.7  | CUT TO WASTE  |      |          |             |               |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 2 - EARTHWORKS

| Item                    | Description   | Unit | Quantity | Rate     | Amount                 |
|-------------------------|---|------|----------|----------|------------------------|
|                         | Excavate in all materials met, transport to dump areas, place compact and trim to grade material from cuts that is unsuitable for inclusion in embankment construction or is surplus to quantities required for embankment construction | m3   | 52,000   | \$ 10.00 | \$ 520,000.00          |
| 2.8                     | <b>ROCK EXCAVATION</b>  |      |          |          |                        |
|                         | (a) Extra Over to 2.5 and 2.7, for excavation in rock using conventional excavators having a flywheel horsepower of 268kW or greater.   | m3   | 4,000    | \$ 40.00 | \$ 160,000.00          |
|                         | (b) Extra Over to 2.5 and 2.8, for excavation in rock requiring blasting.   | m3   | 1,000    | \$ 60.00 | \$ 60,000.00           |
| 2.9                     | <b>VERGE/BATTER PROTECTION</b>  |      |          |          |                        |
|                         | (a) Topsoil<br>Uplift from stockpile and place 100 mm deep topsoil layer on batter slopes and elsewhere as directed by the Engineer. Include grassing and maintenance (Provisional Item).   | m2   | 5,000    | \$ 6.50  | \$ 32,500.00           |
|                         | (b) Sprigging<br>Construct topsoil layer 100 mm deep including sprigging. (Provisional Item)  | m2   | 5,000    | \$ 17.00 | \$ 85,000.00           |
|                         | (c) Turfing<br>Construct turfing and place sods on batters. Include for establishment, maintenance, and rehabilitation of turfing are (Provisional Item).   | m2   | 5,000    | \$ 27.00 | \$ 135,000.00          |
| <b>TOTAL BILL No. 2</b> |   |      |          |          | <b>\$ 2,710,000.00</b> |

**CARACOL ROAD UPGRADE PROJECT**

**LOT 1, CONSTRUCT 1A**

**BILL OF QUANTITIES**

**Bill No. 3 - QUARRY AND BORROW SITE DEVELOPMENT AND OPERATIONS**

| Item                    | Description   | Unit | Quantity | Rate         | Amount               |
|-------------------------|---|------|----------|--------------|----------------------|
| 3.1                     | <p>QUARRY AND BORROW SITE MANAGEMENT PLANS</p> <p>Prepare, submit and revise as necessary quarry/borrow site management plans, inclusiv of initial, intermediate and final topographical survey and volumes calculations, the following contractor nominated sites:</p> <p>(a) Dist from Tree Rd Jct 12+550 RHS 283060, 189090.8)</p> | LS   | 1        | \$ 60,000.00 | \$ 60,000.00         |
| 3.2                     | <p>ENVIRONMENTAL REQUIREMENTS</p> <p>Construct/provide and maintain all required environmental mitigation including silt detention ponds:</p> <p>(a) Dist from Tree Rd Jct 12+550 RHS 283060, 189090.8)</p>   | LS   | 1        | \$ 30,000.00 | \$ 30,000.00         |
| 3.3                     | <p>FACILITIES</p> <p>Allow for construction and maintenance of all buildings, services and warning devices necessary to comply with specified requirements at all sites.</p> <p>(a) Dist from Tree Rd Jct 12+550 RHS 283060, 189090.8)</p>  | LS   | 1        | \$ 60,000.00 | \$ 60,000.00         |
| <b>TOTAL BILL No. 3</b> |   |      |          |              | <b>\$ 150,000.00</b> |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 4 - DRAINAGE

| Item | Description   | Unit | Quantity | Rate         | Amount        |
|------|---|------|----------|--------------|---------------|
| 4.1  | REMOVE EXISTING CULVERTS<br>Excavate for removal and transport re-usable pipe culverts to the employer's yard in Santa Elena and backfill excavation with compacted selected fill.                                    | No   | 12       | \$ 3,000.00  | \$ 36,000.00  |
| 4.2  | SINGLE PIPE CROSS ROAD CULVERTS<br>Excavate for bed and construct reinforced concrete soil tight jointed pipe culverts. Including bedding, hardfill surrounds and backfill.   |      |          |              |               |
|      | (a) 600 dia   | m    | 160.2    | \$ 750.00    | \$ 120,150.00 |
|      | (b) 750 dia   | m    | 26.2     | \$ 850.00    | \$ 22,270.00  |
|      | (c) 900 dia   | m    | 87       | \$ 950.00    | \$ 82,650.00  |
|      | (d) 1200 dia  | m    | 93       | \$ 1,300.00  | \$ 120,900.00 |
|      | (e) 1500 dia  | m    | 51.8     | \$ 1,600.00  | \$ 82,880.00  |
| 4.3  | MULTI PIPE CROSS ROAD CULVERTS<br>Excavate for bed and construct reinforced concrete soil tight jointed pipe culverts. Including bedding, hardfill surrounds and backfill.  |      |          |              |               |
|      | (a) Twin 1500 dia   | m    | 59.2     | \$ 3,100.00  | \$ 183,520.00 |
| 4.4  | ADDITIONAL CROSS ROAD PIPE CULVERTS<br><br>Provisional Sum allowance of \$50,000.00 for additional pipe culverts installed at direction of the Engineer.  | PS   | 1        | \$ 50,000.00 | \$ 50,000.00  |
| 4.5  | CULVERTS FOR ACCESSWAYS<br>Excavate for bed and construct HDPE pipe culverts at property accessways, including bedding, hardfill surrounds and backfill.  |      |          |              |               |
|      | (a) 450 dia   | m    | 357      | \$ 450.00    | \$ 160,650.00 |
|      | (b) 600 dia   | m    | 172      | \$ 650.00    | \$ 111,800.00 |
|      | (c) 750 dia   | m    | 73       | \$ 850.00    | \$ 62,050.00  |
|      | (d) 900 dia   | m    | 14       | \$ 1,050.00  | \$ 14,700.00  |
| 4.6  | CONCRETE MASONRY BLOCK BOX DRAINS<br>Excavate for and construct concrete base and concrete block walls to form box drain. Excludes construction of cover slab. Includes all bedding, hardfill surrounds and backfill. |      |          |              |               |
|      | (a) 0.2W x 0.4D   | m    | 277      | \$ 170.00    | \$ 47,090.00  |
|      | (b) 0.3W x 0.6D   | m    | 28       | \$ 225.00    | \$ 6,300.00   |
|      | (c) 0.6W x 0.6D   | m    | 1993     | \$ 245.00    | \$ 488,285.00 |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 4 - DRAINAGE

| Item   | Description   | Unit                     | Quantity     | Rate         | Amount       |
|--|---|--------------------------|--------------|--------------|--------------|
| 4.7  | (d) 1.0W x 0.6D   | m                        | 180          | \$ 330.00    | \$ 59,400.00 |
|  | REINFORCED CONCRETE BOX CULVERT   |                          |              |              |              |
|  | Excavate for and construct reinforced concrete box drain base and walls and roof slab. Including bedding, hardfill surrounds and backfill.                      |                          |              |              |              |
|  | (a) 0.2W x 0.4D   | m                        | 25           | \$ 270.00    | \$ 6,750.00  |
|  | (b) 0.3W x 0.6D   | m                        | 18           | \$ 360.00    | \$ 6,480.00  |
| 4.8  | (c) 0.6W x 0.6D   | m                        | 262          | \$ 375.00    | \$ 98,250.00 |
|  | (d) 1.0W x 0.6D   | m                        | 41           | \$ 570.00    | \$ 23,370.00 |
|  | REINFORCED CONCRETE BOX DRAIN   |                          |              |              |              |
|  | Excavate for and construct reinforced concrete box drain base and walls. Including bedding, hardfill surrounds and backfill.                                    |                          |              |              |              |
|  | (a) 0.2W x 0.4D   | m                        | 18           | \$ 234.00    | \$ 4,212.00  |
| 4.9  | (b) 0.3W x 0.6D   | m                        | 9            | \$ 324.00    | \$ 2,916.00  |
|  | (c) 0.6W x 0.6D   | m                        | 18           | \$ 378.00    | \$ 6,804.00  |
|  | (d) 1.0W x 0.6D   | m                        | 7            | \$ 450.00    | \$ 3,150.00  |
|  | REINFORCED CONCRETE "U" DRAIN   |                          |              |              |              |
| 4.10   | Excavate for and construct 1.5m wide by 1.2m deep reinforced concrete box drain base and walls. Including bedding, weep holes, hardfill surrounds and backfill. | Not in Lot 1 Contract 1A |              |              |              |
|  | FORMWORK TO SUPPORT FOOTPATH AND VEHICLE ACCESS CONCRETE SLAB CONSTRUCTION OVER BOX DRAINS IDENTIFIED IN ITEMS 4.6 AND 4.8                                      |                          |              |              |              |
|  | Provision of formwork to support construction of footpath and access slabs over masonry and concrete box drains identified in items 4.6 and 4.8                 |                          |              |              |              |
|  | (a) 0.2W x 0.4D   | m                        | 295          | \$ 5.00      | \$ 1,475.00  |
|  | (b) 0.3W x 0.6D   | m                        | 37           | \$ 7.50      | \$ 277.50    |
| 4.11   | (c) 0.6W x 0.6D   | m                        | 2011         | \$ 15.00     | \$ 30,165.00 |
|  | (d) 1.0W x 0.6D   | m                        | 187          | \$ 25.00     | \$ 4,675.00  |
|  | REINFORCED CONCRETE BOX CULVERT   |                          |              |              |              |
| Excavate for and construct reinforced concrete box culvert with excavation and backfill excluding end structures |   |                          |              |              |              |
| Dimensions 200x90cm Dist. 909m   | No  | 1                        | \$ 23,000.00 | \$ 23,000.00 |              |
| Dimensions 200x90cm Dist. 1378m  | No  | 1                        | \$ 36,400.00 | \$ 36,400.00 |              |

**CARACOL ROAD UPGRADE PROJECT**  
**LOT 1, CONSTRUCT 1A**  
**BILL OF QUANTITIES**  
**Bill No. 4 - DRAINAGE**

| Item | Description   | Unit | Quantity | Rate         | Amount        |
|------|---|------|----------|--------------|---------------|
|      | Dimensions 400x400cm Dist. 41258m with pedestrian metal rails. Include for all galvanized tubing, bolt assembly and welding. Welding to be painted with two coats galvanized paints.          | No   | 1        | \$ 24,800.00 | \$ 24,800.00  |
|      | Dimensions 400x200cm Dist. 4259m with pedestrian metal rails. Include for all galvanized tubing, bolt assembly and welding. Welding to be painted with two coats galvanized paints.           | No   | 1        | \$ 41,900.00 | \$ 41,900.00  |
| 4.12 | <b>INLET AND OUTLET STRUCTURES FOR CROSS ROAD PIPE CULVERTS (TYPE 1)</b><br>Excavate for and construct reinforced concrete end structure. Including bedding, hardfill surrounds and backfill. |      |          |              |               |
|      | (a) 600 dia   | m3   | 28.8     | \$ 1,000.00  | \$ 28,800.00  |
|      | (b) 750 dia   | m3   | 9.6      | \$ 1,000.00  | \$ 9,600.00   |
|      | (c) 900 dia   | m3   | 41.0     | \$ 1,000.00  | \$ 41,000.00  |
|      | (d) 1200 dia  | m3   | 38.4     | \$ 1,000.00  | \$ 38,400.00  |
|      | (e) 1500 dia  | m3   | 80.5     | \$ 1,000.00  | \$ 80,500.00  |
|      | (f) Twin 900 dia culverts   | m3   | 6.0      | \$ 1,000.00  | \$ 6,000.00   |
|      | (g) Twin 1200 dia culverts  | m3   | 12.4     | \$ 1,000.00  | \$ 12,400.00  |
|      | (h) Twin 1500 dia culverts  | m3   | 122.5    | \$ 1,000.00  | \$ 122,500.00 |
| 4.13 | <b>INLET AND OUTLET STRUCTURES FOR CROSS ROAD PIPE CULVERTS (TYPE 2)</b><br>Excavate for and construct reinforced concrete end structure. Including bedding, hardfill surrounds and backfill. |      |          |              |               |
|      | (a) 750 dia   | m3   | 2.5      | \$ 1,000.00  | \$ 2,500.00   |
|      | (b) 1200 dia  | m3   | 5.3      | \$ 1,000.00  | \$ 5,300.00   |
| 4.14 | <b>TWO END STRUCTURES INLET AND OUTLET</b><br>Excavate for and construct reinforced concrete two end structures for inlet and outlet to culverts (Including bedding and backfill).            |      |          |              |               |
|      | Culvert with dimensions 200x90cm Dist. 909 m  | No   | 1        | \$ 26,900.00 | \$ 26,900.00  |
|      | Culvert with dimensions 200x90cm Dist. 1378 m   | No   | 1        | \$ 26,900.00 | \$ 26,900.00  |
|      | Culvert with dimensions 400x400cm Dist. 41258 m   | No   | 1        | \$ 29,800.00 | \$ 29,800.00  |
|      | Culvert with dimensions 400x200cm Dist. 4259 m  | No   | 1        | \$ 48,300.00 | \$ 48,300.00  |
| 4.15 | <b>MOUNTABLE GROUTED RIP RAP INLET AND OUTLET STRUCTURES FOR HDPE ACCESS CULVERTS</b>   |      |          |              |               |
|      | (a) 450 dia   | m2   | 381      | \$ 30.00     | \$ 11,430.00  |
|      | (b) 600 dia   | m2   | 257      | \$ 30.00     | \$ 7,710.00   |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 4 - DRAINAGE

| Item | Description   | Unit | Quantity | Rate         | Amount        |
|------|---|------|----------|--------------|---------------|
|      | (c) 750 dia   | m2   | 279      | \$ 30.00     | \$ 8,370.00   |
|      | (d) 900 dia   | m2   | 32       | \$ 30.00     | \$ 960.00     |
| 4.16 | BOX DRAIN/CULVERT INLET AND OUTLET STRUCTURES<br>Excavate for and construct reinforced concrete end structure. Including bedding, hardfill surrounds and backfill.  |      |          |              |               |
|      | (a) 0.2W x 0.4D   | m3   | 0.6      | \$ 1,000.00  | \$ 600.00     |
|      | (b) 0.3W x 0.6D   | m3   | 1.6      | \$ 1,000.00  | \$ 1,600.00   |
|      | (c) 0.6W x 0.6D   | m3   | 32.3     | \$ 1,000.00  | \$ 32,300.00  |
|      | (d) 1.0W x 0.6D   | m3   | 1.2      | \$ 1,000.00  | \$ 1,200.00   |
| 4.17 | BOX DRAIN INLET STRUCTURE GRATE<br>Excavate for and construct reinforced concrete end structure   |      |          |              |               |
|      | (a) 0.3W x 0.6D   | No   | 1        | \$ 400.00    | \$ 400.00     |
|      | (b) 0.6W x 0.6D   | No   | 26       | \$ 450.00    | \$ 11,700.00  |
| 4.18 | CULVERT CASCADE OUTLET STRUCTURE (TYPE 3 OUTLET STRUCTURE)<br>Provisional Sum allowance of \$40,000.00 for construction of grouted rock cascade outlet structures as detailed and directed by the Engineer. | PS   | 1        | \$ 40,000.00 | \$ 40,000.00  |
| 4.19 | UNDERCUT<br>Undercut unsuitable material below culvert trench or structure foundation level. Remove undercut material to dump. Include for backfilling undercut with compacted hardfill. (Provisional Item) | m3   | 200      | \$ 70.00     | \$ 14,000.00  |
| 4.20 | EXCAVATION IN ROCK<br>Extra over to Item 4.17 to allow for excavation in rock. (Provisional Item)   | m3   | 100      | \$ 40.00     | \$ 4,000.00   |
| 4.21 | STREAM REALIGNMENT AND REGRADING<br>Allow for regrading of stream beds upstream and downstream of proposed drainage structures.   | m3   | 500      | \$ 30.00     | \$ 15,000.00  |
| 4.22 | KERBS AND CHANNELS  |      |          |              |               |
|      | (a) Supply composite materials and construct kerb and channel complete  | m    | 2420     | \$ 110.00    | \$ 266,200.00 |
|      | (b) Supply composite materials and construct nib kerb complete  | m    | 240      | \$ 95.00     | \$ 22,800.00  |



CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 4 - DRAINAGE

| Item                    | Description  | Unit                     | Quantity | Rate      | Amount                 |
|-------------------------|--|--------------------------|----------|-----------|------------------------|
|                         | (c) Supply composite materials and construct Type A dish channel complete. (Provisional Item)  | m                        | 50       | \$ 130.00 | \$ 6,500.00            |
|                         | (d) Supply composite materials and construct flush kerb complete   | Not in Lot 1 Contract A1 |          |           |                        |
|                         | e) Extra over item (a) to © to construct (driveway and pram) in kerb and channel   | No                       | 58       | \$ 350.00 | \$ 20,300.00           |
| 4.23                    | SUBSOIL DRAIN<br>Supply composite materials and construct subsoil drains (Provisional Item)  | m                        | 1500     | \$ 57.00  | \$ 85,500.00           |
| 4.24                    | GABION BASKETS<br>Supply 2x1x1 gabion baskets and composite materials and construct culvert inlet and outlet headwalls, protection works and retaining walls where directed. | m3                       | 80       | \$ 58.50  | \$ 4,680.00            |
| 4.25                    | RENO MATTRESS<br>Supply Reno Mattress and composite materials for scour protection at inlet and outlet structures  | m3                       | 92       | \$ 38.55  | \$ 3,546.60            |
| 4.26                    | ROCK RIP RAP<br>(a) Supply and place rock rip rap at culvert outlets (Provisional Item)  | m3                       | 1,240    | \$ 80.00  | \$ 99,200.00           |
|                         | (b) Supply and place 150-250mm rock rip rap in side drains where detailed or directed.   | m2                       | 3,680    | \$ 20.00  | \$ 73,600.00           |
| 4.27                    | GROUTED RIP RAP LINING<br>Cemented rock rip rap lining for side drains.  | m2                       | 3,380    | \$ 38.00  | \$ 128,440.00          |
| 4.28                    | CONCRETE SIDE DRAIN LINING<br>Concrete lining for side drains (Provisional Item)   | m2                       | 100      | \$ 195.00 | \$ 19,500.00           |
| 4.29                    | TOE DRAINS TO FILL BATTERS<br><br>Excavate toe drains to fill batters and discharge to water course as directed or detailed. (Provisional Item)                              | m                        | 1230     | \$ 30.00  | \$ 36,900.00           |
| <b>TOTAL BILL No. 4</b> |  |                          |          |           | <b>\$ 3,358,606.10</b> |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 5 - PAVEMENTS AND SURFACING

| Item | Description   | Unit | Quantity | Rate          | Amount        |
|------|---|------|----------|---------------|---------------|
| 5.1  | SCARIFYING EXISTING PAVEMENT<br>Scarifying existing village road pavement to a 50mm depth to allow for shaping and compacting granular overlay layer.   | m2   | 24,340   | \$ 2.50       | \$ 60,850.00  |
| 5.2  | SUB GRADE IMPROVEMENT LAYER<br>Supply, place and compact sub grade improvement material as specified. (Provisional Item)  | m3   | 13,520   | \$ 18.00      | \$ 243,360.00 |
| 5.3  | SUB BASECOURSE<br>Supply, place and compact basecourse  |      |          |               |               |
|      | (a) San Antonio to Tripartite Junction  | m3   | 12,750   | \$ 60.00      | \$ 765,000.00 |
|      | (b) Santa Elena to Cristo Rey   | m3   | 12,450   | \$ 60.00      | \$ 747,000.00 |
| 5.4  | BASE COURSE   |      |          |               |               |
|      | (a) San Antonio to Tripartite Junction  | m3   | 13,700   | \$ 60.00      | \$ 822,000.00 |
|      | (b) Santa Elena to Cristo Rey   | m3   | 13,000   | \$ 60.00      | \$ 780,000.00 |
| 5.5  | BITUMINOUS SURFACE TREATMENT<br>PRIME COAT<br>Supply materials and apply MC70 prime coat and blinder (Provisional)  | m2   | 25,000   | \$ 2.46       | \$ 61,500.00  |
| 5.6  | FIRST COAT SEAL<br>Supply materials and apply first coat bituminous binder and grade 3 chips  | m2   | 122,500  | \$ 5.96       | \$ 730,100.00 |
| 5.7  | SECOND COAT SEAL<br>Supply materials and apply second coat bituminous binder and grade 1 chips  | m2   | 101,550  | \$ 7.46       | \$ 757,563.00 |
| 5.8  | PRE COATING OF CHIPS<br>Extra over to Items 5.6 and 5.7 supply binder and precoat chips as specified where directed by the Engineer. (Provisional Item)   | m2   | 224,050  | \$ 0.20       | \$ 44,810.00  |
| 5.9  | CONCRETE PAVEMENT<br>Provisional Sum allowance of \$130,000.00 for the supply, transport and placement of all materials for concrete pavement as specified including reinforcing and joint construction, as directed by the Engineer. | PS   | 1        | \$ 130,000.00 | \$ 130,000.00 |
| 5.10 | CONCRETE FOOTPATHS  |      |          |               |               |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 5 - PAVEMENTS AND SURFACING

| Item                    | Description  | Unit | Quantity | Rate      | Amount                 |
|-------------------------|--|------|----------|-----------|------------------------|
|                         | Supply materials and construct concrete footpaths            |      |          |           |                        |
|                         | (a) Footpaths on grade                                       | m2   | 646      | \$ 125.00 | \$ 80,750.00           |
|                         | (b) 0.8m to 0.6m wide footpath over box drain                | m2   | 155      | \$ 125.00 | \$ 19,375.00           |
|                         | (c) 1.2m wide footpath over box drain                        | m2   | 465      | \$ 125.00 | \$ 58,125.00           |
|                         | (d) 1.5m wide footpath over box drain                        | m2   | 2274     | \$ 125.00 | \$ 284,250.00          |
| 5.11                    | RESIDENTIAL ACCESS REINFORCED CONCRETE SLAB                  |      |          |           |                        |
|                         | Supply materials and construct concrete footpaths            |      |          |           |                        |
|                         | (a) Residential access on grade                              | m2   | 92       | \$ 125.00 | \$ 11,500.00           |
|                         | (b) Residential access over 0.6m wide (or smaller) box drain | m2   | 511      | \$ 125.00 | \$ 63,875.00           |
|                         | (c) Residential access over 0.8m wide (or wider) box drain   | m2   | 12       | \$ 125.00 | \$ 1,500.00            |
| 5.12                    | COMMERCIAL ACCESS REINFORCED CONCRETE SLAB                   |      |          |           |                        |
|                         | Supply materials and construct concrete footpaths            |      |          |           |                        |
|                         | (a) Commercial access on grade                               | m2   | 16       | \$ 200.00 | \$ 3,200.00            |
|                         | (b) Commercial access over 0.6m wide (or smaller) box drain  | m2   | 70       | \$ 200.00 | \$ 14,000.00           |
| <b>TOTAL BILL No. 5</b> |  |      |          |           | <b>\$ 5,678,758.00</b> |

CARACOL ROAD UPGRADE PROJECT

LOT 1, CONSTRUCT 1A

BILL OF QUANTITIES

Bill No. 6 - ROAD MARKING, FURNITURE AND MISCELLANEOUS WORKS

| Item | Description  | Unit                     | Quantity | Rate        | Amount        |
|------|--|--------------------------|----------|-------------|---------------|
| 6.1  | ROAD MARKING PAINT   |                          |          |             |               |
|      | (a) Edgeline, 100mm wide continuous white  | m                        | 25,500   | \$ 5.25     | \$ 133,875.00 |
|      | (b) Centreline, 100mm wide dashed yeelow (3m stripe, 7m gap)   | m                        | 9,000    | \$ 4.25     | \$ 38,250.00  |
|      | (c) White broken edgeline (1m stripe, 2m gap)  | m                        | 650      | \$ 4.25     | \$ 2,762.50   |
|      | (d) White hold line (300mm wide)   | m                        | 20       | \$ 18.00    | \$ 360.00     |
|      | (e) Yellow stop limit line (300mm wide)  | m                        | 315      | \$ 18.00    | \$ 5,670.00   |
|      | (f) Yellow continuous prohibitory line (No overtaking)   | m                        | 3,730    | \$ 5.75     | \$ 21,447.50  |
|      | (g) White Painted Stop   | No                       | 36       | \$ 800.00   | \$ 28,800.00  |
|      | (h) White painted symbols, letters and numbers   | No                       | 220      | \$ 250.00   | \$ 55,000.00  |
|      | (i) Pedestrian crossing markings   | No                       | 0        | \$ -        | \$ -          |
|      | (j) Speed hump marking   | No                       | 7        | \$ 1,400.00 | \$ 9,800.00   |
|      | (k) 600mm wide chevron   | m                        | 0        | \$ -        | \$ -          |
| 6.2  | SIGNS  |                          |          |             |               |
|      | (a) Supply and erect 1 panel single post signs   | No                       | 113      | \$ 650.00   | \$ 73,450.00  |
|      | (b) Supply and erect 4 panel single post signs   | No                       | 16       | \$ 1,050.00 | \$ 16,800.00  |
|      | (c) Supply and erect 1 panel double post signs   | No                       | 9        | \$ 1,250.00 | \$ 11,250.00  |
|      | (d) Supply and erect PW-68 5 post sign   | No                       | 8        | \$ 1,500.00 | \$ 12,000.00  |
|      | (e) Dismantle, refurbish and re-erect existing overhead sign gantrie structure and attach new signs as directed. (Provisional Sum) | Not in Lot 1 Contract 1A |          |             |               |
|      | (f) Remove existing redundant signs  | No                       | 50       | \$ 300.00   | \$ 15,000.00  |
|      | (g) Supply and erect WI-8 chevrons   | No                       | 56       | \$ 450.00   | \$ 25,200.00  |
| 6.3  | EDGE MARKER POSTS  |                          |          |             |               |
|      | Supply and erect edge marker posts   | No                       | 210      | \$ 80.00    | \$ 16,800.00  |
| 6.4  | RAISED REFLECTORISED PAVEMENT MARKERS  |                          |          |             |               |
|      | Supply and install RRPM'S  |                          |          |             |               |
|      | (a) Yellow   | No                       | 600      | \$ 20.00    | \$ 12,000.00  |
| 6.5  | ROADSIDE BARRIERS  |                          |          |             |               |
|      | (a) Supply composite materials and construct galvanized steel W-Section guard rails as detailed and specified                      | m                        | 1195     | \$ 200.00   | \$ 239,000.00 |
|      | (b) Supply and instal TL-3 LEADING energy absorbing terminal ends to guardrails  | No                       | 16       | \$ 2,500.00 | \$ 40,000.00  |
|      | (c) Extra over for supply of composite materials for transition to and structural connection to Cristo Rey Bridge barrier.         | No                       | 4        | \$ 2,200.00 | \$ 8,800.00   |
| 6.6  | STREET LIGHTS  |                          |          |             |               |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 6 - ROAD MARKING, FURNITURE AND MISCELLANEOUS WORKS

| Item | Description   | Unit                     | Quantity | Rate         | Amount       |
|------|---|--------------------------|----------|--------------|--------------|
|      | Supply and install street lighting poles, outreaches, fittings, cable, controls and connect to network<br>(a) George Price Highway at Georgeville - install foundation, light pole with single out reach and LED luminaire.<br>(b) Chiquibul Road at Georgeville - install new single out reach with LED luminaire on existing poles.<br>(c) Provisional Sum Allowance of \$80,000.00 for supply and installation of solar powered LED streetlighting for Tripartite Junction as directed by the Engineer.<br>(d) San Antonio - install new out reach with LED luminaire on existing poles.<br>(e) Cristo Rey - install new out reach with LED luminaire on existing poles.<br>(f) Santa Elena - supply and install new out reach with LED luminaire on existing poles.<br>(g) Trench 4" ducting with 0.6m cover within berm and construct street lighting power supply<br>(h) Trench 4" ducting with 0.9m cover within berm and construct street lighting power supply |                          |          |              |              |
|      |   | Not in Lot 1 Contract 1A |          |              | \$ 80,000.00 |
|      |   | No                       | 24       | \$ 1,320.00  | \$ 31,680.00 |
|      |   | No                       | 4        | \$ 1,320.00  | \$ 5,280.00  |
|      |   | No                       | 24       | \$ 1,320.00  | \$ 31,680.00 |
|      |   | Not in Lot 1 Contract 1A |          |              |              |
| 6.7  | PEDESTRIAN RAMP<br>Supply composite materials and construct pedestrian ramp   | No                       | 3        | \$ 10,500.00 | \$ 31,500.00 |
| 6.8  | SPEED HUMPS<br>Supply composite materials and construct speed humps   | No                       | 7        | \$ 7,000.00  | \$ 49,000.00 |
| 6.9  | BUS SHELTERS<br>Provisional Sum Allowance of \$30,000.00 for the supply of all composite materials and construction inputs to provide bus shelters as directed by the Engineer  | Not in Lot 1 Contract 1A |          |              |              |
| 6.10 | FENCING<br>(a) Dismantle existing post and wire fences and remove from site or stockpile for re-use<br>(b) Dismantle existing fence types other than post and wire and remove from site or stockpile for re-use<br>(c) Re-erect post and wire fence line using stockpiled materials. Including for new sundry items (nails, staples etc.)   | m                        | 1070     | \$ 5.00      | \$ 5,350.00  |
|      |   | m                        | 310      | \$ 8.00      | \$ 2,480.00  |
|      |   | m                        | 320      | \$ 5.00      | \$ 1,600.00  |

**CARACOL ROAD UPGRADE PROJECT**

**LOT 1, CONSTRUCT 1A**

**BILL OF QUANTITIES**

**Bill No. 6 - ROAD MARKING, FURNITURE AND MISCELLANEOUS WORKS**

| Item                    | Description  | Unit                     | Quantity | Rate          | Amount                 |
|-------------------------|--|--------------------------|----------|---------------|------------------------|
|                         | (d) Supply composite materials and construct post and wire fence (Provisional Item)  | m                        | 650      | \$ 30.00      | \$ 19,500.00           |
|                         | (e) Provisional Sum allowance of \$35,000.00 for the supply of composite materials and the construction of fences, other than post and wire, to match and tie into existing forms of fence being either removed or partially removed | PS                       | 1        | \$ 35,000.00  | \$ 35,000.00           |
| 6.11                    | <b>CONCRETE PEDESTRIAN ACCESS SLABS</b>  |                          |          |               |                        |
|                         | (a) Double slab  | No                       | 3        | \$ 5,200.00   | \$ 15,600.00           |
| 6.12                    | <b>WATERMAIN RELOCATIONS</b>   |                          |          |               |                        |
|                         | (a) Provisional Sum allowance of \$500,000.00 for the provision of a new 8" watermain from Santa Elena to Cristo Rey Village as directed by the Engineer   | PS                       | 1        | \$ 500,000.00 | \$ 500,000.00          |
|                         | (b) Provisional Sum allowance of \$120,000.00 for the relocation of watermains in Georgeville Vilalge, as directed by the Engineer.  | Not in Lot 1 Contract 1A |          |               |                        |
|                         | (c) Provisional Sum allowance of \$300,000.00 for the relocation of watermains in San Antonio Village, as directed by the Engineer.  | PS                       | 1        | \$ 300,000.00 | \$ 300,000.00          |
|                         | (d) Provisional Sum allowance of \$160,000.00 for the relocation of watermains in San Antonio and Tripartite Junction, as directed by the Engineer.  | PS                       | 1        | \$ 160,000.00 | \$ 160,000.00          |
|                         | (e) Provisional Sum allowance of \$120,000.00 for the relocation of watermains between Tripartite Junction and the Seven Mile Progresso Turnoff, as directed by the Engineer.  | Not in Lot 1 Contract 1A |          |               |                        |
|                         | (f) Provisional Sum allowance of \$100,000.00 for the relocation of watermains in Cristo Rey Village, as directed by the Engineer.   | PS                       | 1        | \$ 100,000.00 | \$ 100,000.00          |
| <b>TOTAL BILL No. 6</b> |  |                          |          |               | <b>\$ 2,134,935.00</b> |

**CARACOL ROAD UPGRADE PROJECT**

**LOT 1, CONSTRUCT 1A**

**BILL OF QUANTITIES**

**Bill No. 7 - DAYWORKS**

| Item       | Description   | Unit      | Quantity | Rate        | Amount               |
|------------|---|-----------|----------|-------------|----------------------|
| <b>7.1</b> | <b>LABOUR</b>   |           |          |             |                      |
| 7.1.1      | Foreman   | Hr        | 200      | \$ 15.00    | \$ 3,000.00          |
| 7.1.2      | Drive (Operator)  | Hr        | 400      | \$ 7.50     | \$ 3,000.00          |
| 7.1.3      | Skilled Labourer  | Hr        | 400      | \$ 10.00    | \$ 4,000.00          |
| 7.1.4      | Unskilled Labourer  | Hr        | 800      | \$ 5.65     | \$ 4,520.00          |
| 7.1.5      | Tradesman   | Hr        | 400      | \$ 10.00    | \$ 4,000.00          |
| 7.1.6      | Surveyor  | Hr        | 200      | \$ 25.00    | \$ 5,000.00          |
| 7.1.7      | Technician  | Hr        | 200      | \$ 17.00    | \$ 3,400.00          |
|            | <b>Subtotal for Dayworks: 1 Labour</b>                          |           |          |             | <b>\$ 26,920.00</b>  |
| <b>7.2</b> | <b>MATERIALS</b>  |           |          |             |                      |
| 7.2.1      | Petrol (Gasoline)   | US Gallon | 400      | \$ 10.44    | \$ 4,176.00          |
| 7.2.2      | Diesel Oil  | US Gallon | 800      | \$ 9.65     | \$ 7,720.00          |
| 7.2.3      | Lubricant   | Kg        | 200      | \$ 6.50     | \$ 1,300.00          |
| 7.2.4      | Bitumen Cut-back MC-70  | t         | 4        | \$ 1,800.00 | \$ 7,200.00          |
| 7.2.5      | Bitumen MC 3000   | t         | 4        | \$ 1,700.00 | \$ 6,800.00          |
| 7.2.6      | Road Paint  | l         | 200      | \$ 23.00    | \$ 4,600.00          |
| 7.2.7      | Portland cement   | t         | 4        | \$ 485.00   | \$ 1,940.00          |
| 7.2.8      | Mild steel reinforcement  | t         | 2        | \$ 2,300.00 | \$ 4,600.00          |
| 7.2.9      | High yield steel reinforcement                                  | t         | 8        | \$ 2,420.00 | \$ 19,360.00         |
| 7.2.10     | Fine Aggregate for concrete                                     | m3        | 20       | \$ 60.00    | \$ 1,200.00          |
| 7.2.11     | Coarse aggregate for concrete                                   | m3        | 20       | \$ 82.00    | \$ 1,640.00          |
| 7.2.12     | Concrete class C30  | m3        | 20       | \$ 335.00   | \$ 6,700.00          |
| 7.2.13     | Structural steel RSJ, UB etc                                    | t         | 4        | \$ 2,400.00 | \$ 9,600.00          |
| 7.2.14     | Granular material for sub base                                  | m3        | 80       | \$ 40.00    | \$ 3,200.00          |
| 7.2.15     | Crushed aggregate for sub base                                  | m3        | 200      | \$ 46.00    | \$ 9,200.00          |
| 7.2.16     | Crushed aggregate for basecourse                                | m3        | 200      | \$ 60.00    | \$ 12,000.00         |
| 7.2.17     | Crushed aggregate for road surface chips                        | m3        | 40       | \$ 65.00    | \$ 2,600.00          |
| 7.2.18     | Gabion Baskets (2x1x1) Cage only                                | ea        | 20       | \$ 400.00   | \$ 8,000.00          |
| 7.2.19     | Reno Mattress (2x1x0.3) Cage only                               | ea        | 20       | \$ 300.00   | \$ 6,000.00          |
|            | <b>Subtotal for Dayworks: 2 Materials</b>                       |           |          |             | <b>\$ 117,836.00</b> |
| 7.2.20     | Add 15 percent of subtotal for Contractors overhead, profit etc |           |          |             | <b>\$ 17,675.40</b>  |
| <b>7.3</b> | <b>CONTRACTOR EQUIPMENT</b>                                     |           |          |             |                      |
| 7.3.1      | Bulldozer 70kW  | Hr        | 20       | \$ 150.00   | \$ 3,000.00          |
| 7.3.2      | Bulldozer 150kW   | Hr        | 20       | \$ 220.00   | \$ 4,400.00          |
| 7.3.3      | Bulldozer 250kW   | Hr        | 20       | \$ 350.00   | \$ 7,000.00          |
| 7.3.4      | Motor Grader 110kW  | Hr        | 40       | \$ 165.00   | \$ 6,600.00          |
| 7.3.5      | Motor Grader 250kW  | Hr        | 40       | \$ 275.00   | \$ 11,000.00         |
| 7.3.6      | Hyrdaulic Excavator 10-14t                                      | Hr        | 40       | \$ 175.00   | \$ 7,000.00          |
| 7.3.7      | Hyrdaulic Excavator 15-24t                                      | Hr        | 40       | \$ 175.00   | \$ 7,000.00          |
| 7.3.8      | Hyrdaulic Excavator 25-35t                                      | Hr        | 20       | \$ 175.00   | \$ 3,500.00          |

**CARACOL ROAD UPGRADE PROJECT**

**LOT 1, CONSTRUCT 1A**

**BILL OF QUANTITIES**

**Bill No. 7 - DAYWORKS**

| Item  | Description                              | Unit | Quantity | Rate      | Amount               |
|---|--|------|----------|-----------|----------------------|
| 7.3.9   | Track-type Loader 80kW                   | Hr   | 40       | \$ 125.00 | \$ 5,000.00          |
| 7.3.10  | Road Stabiliser 15-24t                   | Hr   | 20       | \$ 130.00 | \$ 2,600.00          |
| 7.3.11  | Screening Plant 100t/hr                  | Hr   | 20       | \$ 150.00 | \$ 3,000.00          |
| 7.3.12  | Wheel Loader 60kW                        | Hr   | 20       | \$ 110.00 | \$ 2,200.00          |
| 7.3.13  | Wheel Loader 130kW                       | Hr   | 40       | \$ 150.00 | \$ 6,000.00          |
| 7.3.14  | Air Compressor 5000 1/min                | Hr   | 10       | \$ 60.00  | \$ 600.00            |
| 7.3.15  | Generator 15kW                           | Hr   | 40       | \$ 50.00  | \$ 2,000.00          |
| 7.3.16  | Generator 150kW                          | Hr   | 40       | \$ 90.00  | \$ 3,600.00          |
| 7.3.17  | Motor Blower                             | Hr   | 20       | \$ 75.00  | \$ 1,500.00          |
| 7.3.18  | Self Propelled Road Painting Machine     | Hr   | 20       | \$ 65.00  | \$ 1,300.00          |
| 7.3.19  | Bitumen Distributor                      | Hr   | 20       | \$ 130.00 | \$ 2,600.00          |
| 7.3.20  | Chip Spreader 5m3                        | Hr   | 20       | \$ 120.00 | \$ 2,400.00          |
| 7.3.21  | Dump Truck 15t                           | Hr   | 20       | \$ 85.00  | \$ 1,700.00          |
| 7.3.22  | Tipper Truck 15t                         | Hr   | 40       | \$ 85.00  | \$ 3,400.00          |
| 7.3.23  | Self Propelled Vibrating Roller 8t       | Hr   | 40       | \$ 110.00 | \$ 4,400.00          |
| 7.3.24  | Self Propelled Vibrating Roller 12t      | Hr   | 40       | \$ 130.00 | \$ 5,200.00          |
| 7.3.25  | Self Propelled Pneumatic Roller over 12t | Hr   | 20       | \$ 115.00 | \$ 2,300.00          |
| 7.3.26  | 3 Wheel Steel Roller 10-12t              | Hr   | 20       | \$ 140.00 | \$ 2,800.00          |
| 7.3.27  | Vibrating Plate Compactor 0.4t           | Hr   | 20       | \$ 40.00  | \$ 800.00            |
| 7.3.28  | Jackhammer 25kg                          | Hr   | 20       | \$ 75.00  | \$ 1,500.00          |
| 7.3.29  | Pick-up 1.7t                             | Hr   | 40       | \$ 40.00  | \$ 1,600.00          |
| 7.3.30  | Crushing Plant 50t/hr                    | Hr   | 20       | \$ 250.00 | \$ 5,000.00          |
| 7.3.31  | Concrete Mixer 12kW 0.5m3                | Hr   | 40       | \$ 45.00  | \$ 1,800.00          |
| 7.3.32  | Concrete Vibrator 35mm diameter          | Hr   | 40       | \$ 12.00  | \$ 480.00            |
| 7.3.33  | Concrete Vibrator 63mm diameter          | Hr   | 60       | \$ 15.00  | \$ 900.00            |
| 7.3.34  | Concrete Truck 12t                       | Hr   | 20       | \$ 170.00 | \$ 3,400.00          |
| 7.3.35  | Truck Mounted Crane 10t                  | Hr   | 20       | \$ 150.00 | \$ 3,000.00          |
| 7.3.36  | Truck Mounted Crane 50t                  | Hr   | 20       | \$ 360.00 | \$ 7,200.00          |
| 7.3.37  | Pile Driving Hammer                      | Hr   | 20       | \$ 350.00 | \$ 7,000.00          |
| 7.3.38  | Self Propelled Water Tanker 6,000 litre  | Hr   | 20       | \$ 110.00 | \$ 2,200.00          |
| 7.3.39  | Self Propelled Fuel Tanker 6,000 litre   | Hr   | 20       | \$ 120.00 | \$ 2,400.00          |
| 7.3.40  | Water Pump 50mm Diameter Centrifugal     | Hr   | 20       | \$ 20.00  | \$ 400.00            |
| 7.3.41  | Water Pump 100mm Diameter Centrifugal    | Hr   | 20       | \$ 35.00  | \$ 700.00            |
| 7.3.42  | Arc Welding Equipment                    | Hr   | 20       | \$ 70.00  | \$ 1,400.00          |
| 7.3.43  | Oxyacetylene Equipment                   | Hr   | 20       | \$ 50.00  | \$ 1,000.00          |
| <b>Subtotal for Dayworks: 3 Contractors Equipment</b> |  |      |          |           | <b>\$ 142,880.00</b> |
| 1   | LABOUR                                   |      |          |           | \$ 26,920.00         |
| 2   | MATERIALS                                |      |          |           | \$ 135,511.40        |
| 3   | CONTRACTORS EQUIPMENT                    |      |          |           | \$ 142,880.00        |



CARACOL ROAD UPGRADE PROJECT  
LOT 1, CONSTRUCT 1A  
BILL OF QUANTITIES  
Bill No. 7 - DAYWORKS

| Item | Description  | Unit | Quantity | Rate | Amount        |
|------|--|------|----------|------|---------------|
|      | TOTAL BILL No. 7 Dayworks (Provisional Item) ( Carried forward to Bill No. 8 Summary of Bills) |      |          |      | \$ 305,311.40 |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 2 - EARTHWORKS

| Item | Description   | Unit | Quantity | Rate         | Amount         |
|------|---|------|----------|--------------|----------------|
| 2.1  | SITE CLEARANCE<br>Clear the site of works of all vegetation, debris and deleterious material. All material to be removed from the site becoming the property of the Contractor on leaving the site.   | LS   | 1        | \$ 75,900.00 | \$ 75,900.00   |
| 2.2  | TOPSOIL STRIPPING<br>Strip topsoil from the Site of Works and dispose of clear of the works becoming the property of the contractor on leaving the site.  | m3   | 30,500   | \$ 10.00     | \$ 305,000.00  |
| 2.3  | UNDERCUTTING<br>(a) Undercut material below topsoil strip level in fill areas and remove to dump areas (Provisional Item)   | m3   | 1,000    | \$ 10.00     | \$ 10,000.00   |
|      | (b) Undercut material below subgrade level in cut areas and remove to dump areas. (Provisional Item)  | m3   | 10,000   | \$ 10.00     | \$ 100,000.00  |
| 2.4  | HARDFILL<br>Supply, transport, place and compact hardfill in undercut areas as directed by the Engineer. (Provisional Item)   | m3   | 5,000    | \$ 60.00     | \$ 300,000.00  |
| 2.5  | CUT TO FILL<br>Excavate in all materials met, haul, place and compact material in fill embankments including undercut areas as directed. (Provisional Item)<br>(a) 0+000 To 14+075 (Georgeville to Tripartite)  | m3   | 130,275  | \$ 14.00     | \$1,823,850.00 |
| 2.6  | BORROW TO FILL<br>Source area for borrow, excavate, load, transport, place and compact borrow material in embankments and undercut areas (measured in borrow).<br>(a) 0 to 5 km   | m3   | 54,000   | \$ 17.00     | \$ 918,000.00  |
| 2.7  | CUT TO WASTE<br>Excavate in all materials met, transport to dump areas, place compact and trim to grade material from cuts that is unsuitable for inclusion in embankment construction or is surplus to quantities required for embankment construction | m3   | 67,000   | \$ 10.00     | \$ 670,000.00  |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 2 - EARTHWORKS

| Item                    | Description   | Unit | Quantity | Rate     | Amount                |
|-------------------------|---|------|----------|----------|-----------------------|
| 2.8                     | ROCK EXCAVATION   |      |          |          |                       |
|                         | (a) Extra Over to 2.5 and 2.7, for excavation in rock using conventional excavators having a flywheel horsepower of 268kW or greater.   | m3   | 20,000   | \$ 25.00 | \$ 500,000.00         |
|                         | (b) Extra Over to 2.5 and 2.8, for excavation in rock requiring blasting.   | m3   | 5,630    | \$ 50.00 | \$ 281,500.00         |
| 2.9                     | VERGE/BATTER PROTECTION   |      |          |          |                       |
|                         | (a) Topsoil<br>Uplift from stockpile and place 100 mm deep topsoil layer on batter slopes and elsewhere as directed by the Engineer. Include grassing and maintenance (Provisional Item). | m2   | 5,000    | \$ 6.50  | \$ 32,500.00          |
|                         | (b) Sprigging<br>Construct topsoil layer 100 mm deep including sprigging. (Provisional Item)  | m2   | 5,000    | \$ 17.00 | \$ 85,000.00          |
|                         | (c) Turfing<br>Construct turfing and place sods on batters. Include for establishment, maintenance, and rehabilitation of turfing are (Provisional Item).                                 | m2   | 5,000    | \$ 27.00 | \$ 135,000.00         |
| <b>TOTAL BILL No. 2</b> |   |      |          |          | <b>\$5,236,750.00</b> |

CARACOL ROAD UPGRADE PROJECT

LOT 1, CONSTRUCT 1A

BILL OF QUANTITIES

Bill No. 3 - QUARRY AND BORROW SITE DEVELOPMENT AND OPERATIONS

| Item                    | Description  | Unit | Quantity | Rate         | Amount               |
|-------------------------|--|------|----------|--------------|----------------------|
| 3.1                     | <p>QUARRY AND BORROW SITE MANAGEMENT PLANS</p> <p>Prepare, submit and revise as necessary quarry/borrow site management plans, inclusiv of initial, intermediate and final topographical survey and volumes calculations, the following contractor nominated sites:</p> <p>(a) Dist from Georgville 1+930 LHS (289982.88, 1900374.47)</p> <p>(a) Dist from Georgville 8+530 LHS (291464.01,1894751.87)</p> | LS   | 1        | \$ 50,000.00 | \$ 50,000.00         |
|                         |  | LS   | 1        | \$ 15,000.00 | \$ 15,000.00         |
| 3.2                     | <p>ENVIRONMENTAL REQUIREMENTS</p> <p>Construct/provide and maintain all required environmental mitigation including silt detention ponds:</p> <p>(a) Dist from Georgville 1+930 LHS (289982.88, 1900374.47)</p> <p>(a) Dist from Georgville 8+530 LHS (291464.01,1894751.87)</p>   | LS   | 1        | \$ 10,000.00 | \$ 10,000.00         |
|                         |  | LS   | 1        | \$ 10,000.00 | \$ 10,000.00         |
| 3.3                     | <p>FACILITIES</p> <p>Allow for construction and maintenance of all buildings, services and warning devices necessary to comply with specified requirements at all sites.</p> <p>(a) Dist from Georgville 1+930 LHS (289982.88, 1900374.47)</p> <p>(a) Dist from Georgville 8+530 LHS (291464.01,1894751.87)</p>  | LS   | 1        | \$ 10,000.00 | \$ 10,000.00         |
|                         |  | LS   | 1        | \$ 10,000.00 | \$ 10,000.00         |
| <b>TOTAL BILL No. 3</b> |  |      |          |              | <b>\$ 105,000.00</b> |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 4 - DRAINAGE

| Item | Description  | Unit | Quantity | Rate        | Amount        |
|------|--|------|----------|-------------|---------------|
| 4.1  | REMOVE EXISTING CULVERTS<br>Excavate for removal and transport re-usable pipe culverts to the employer's yard in Santa Elena and backfill excavation with compacted selected fill. | No   | 15       | \$ 3,000.00 | \$ 45,000.00  |
| 4.2  | SINGLE PIPE CROSS ROAD CULVERTS<br>Excavate for bed and construct reinforced concrete soil tight jointed pipe culverts. Including bedding, hardfill surrounds and backfill.        |      |          |             |               |
|      | (a) 600 dia  | m    | 203.4    | \$ 750.00   | \$ 152,550.00 |
|      | (b) 750 dia  | m    | 73.8     | \$ 850.00   | \$ 62,730.00  |
|      | (c) 900 dia  | m    | 52.8     | \$ 950.00   | \$ 50,160.00  |
|      | (d) 1200 dia   | m    | 21.2     | \$ 1,300.00 | \$ 27,560.00  |
|      | (e) 1500 dia   | m    | 71.6     | \$ 1,600.00 | \$ 114,560.00 |
| 4.3  | MULTI PIPE CROSS ROAD CULVERTS<br>Excavate for bed and construct reinforced concrete soil tight jointed pipe culverts. Including bedding, hardfill surrounds and backfill.         |      |          |             |               |
|      | (a) Twin 900 dia   | m    | 26.4     | \$ 1,800.00 | \$ 47,520.00  |
|      | (b) Twin 1200 dia  | m    | 17.6     | \$ 1,250.00 | \$ 22,000.00  |
|      | (c) Twin 1500 dia  | m    | 79.6     | \$ 3,100.00 | \$ 246,760.00 |
| 4.4  | ADDITIONAL CROSS ROAD PIPE CULVERTS<br><br>Provisional Sum allowance of \$50,000.00 for additional pipe culverts installed at direction of the Engineer.                           | PS   | 1        | \$50,000.00 | \$ 50,000.00  |
| 4.5  | CULVERTS FOR ACCESSWAYS<br>Excavate for bed and construct HDPE pipe culverts at property accessways, including bedding, hardfill surrounds and backfill.                           |      |          |             |               |
|      | (a) 450 dia  | m    | 96       | \$ 450.00   | \$ 43,200.00  |
|      | (b) 600 dia  | m    | 60       | \$ 650.00   | \$ 39,000.00  |
|      | (c) 750 dia  | m    | 40       | \$ 850.00   | \$ 34,000.00  |
|      | (d) 900 dia  | m    | 27       | \$ 1,050.00 | \$ 28,350.00  |
|      | (f) Twin 750 dia   | m    | 8        | \$ 1,600.00 | \$ 12,800.00  |
|      | (g) Twin 900 dia   | m    | 33       | \$ 2,000.00 | \$ 66,000.00  |
|      | (h) Twin 1200 dia  | m    | 8        | \$ 1,400.00 | \$ 11,200.00  |
| 4.6  | CONCRETE MASONRY BLOCK BOX DRAINS  |      |          |             |               |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 4 - DRAINAGE

| Item | Description  | Unit | Quantity | Rate        | Amount        |
|------|--|------|----------|-------------|---------------|
|      | Excavate for and construct concrete base and concrete block walls to form box drain. Excludes construction of cover slab. Includes all bedding, hardfill surrounds and backfill.   |      |          |             |               |
|      | (a) 0.6W x 0.6D  | m    | 47       | \$ 245.00   | \$ 11,515.00  |
|      | (b) 1.2W x 0.8D  | m    | 636      | \$ 375.00   | \$ 238,500.00 |
| 4.7  | <b>REINFORCED CONCRETE BOX CULVERT</b><br>Excavate for and construct reinforced concrete box drain base and walls and roof slab. Including bedding, hardfill surrounds and backfill.   |      |          |             |               |
|      | (a) 0.6W x 0.6D  | m    | 20       | \$ 375.00   | \$ 7,500.00   |
|      | (b) 1.2W x 0.8D  | m    | 101      | \$ 690.00   | \$ 69,690.00  |
| 4.8  | <b>REINFORCED CONCRETE BOX DRAIN</b><br>Excavate for and construct reinforced concrete box drain base and walls. Including bedding, hardfill surrounds and backfill.   |      |          |             |               |
|      | (a) 0.6W x 0.6D  | m    | 18       | \$ 315.00   | \$ 5,670.00   |
|      | (b) 1.2W x 0.8D  | m    | 18       | \$ 558.00   | \$ 10,044.00  |
|      | (c) 1.5W x 1.2D  | m    | 24       | \$ 756.00   | \$ 18,144.00  |
| 4.9  | <b>REINFORCED CONCRETE "U" DRAIN</b><br>Excavate for and construct 1.5m wide by 1.2m deep reinforced concrete box drain base and walls. Including bedding, weep holes, hardfill surrounds and backfill.  | m    | 35       | \$ 585.00   | \$ 20,475.00  |
| 4.10 | <b>FORMWORK TO SUPPORT FOOTPATH AND VEHICLE ACCESS CONCRETE SLAB CONSTRUCTION OVER BOX DRAINS IDENTIFIED IN ITEMS 4.6 AND 4.8</b><br>Provision of formwork to support construction of footpath and access slabs over masonry and concrete box drains identified in items 4.6 and 4.8 |      |          |             |               |
|      | (a) 0.6W x 0.6D  | m    | 65       | \$ 15.00    | \$ 975.00     |
|      | (b) 1.2W x 0.8D  | m    | 654      | \$ 30.00    | \$ 19,620.00  |
|      | (c) 1.5W x 1.2D  | m    | 24       | \$ 40.00    | \$ 960.00     |
| 4.11 | <b>INLET AND OUTLET STRUCTURES FOR CROSS ROAD PIPE CULVERTS (TYPE 1)</b><br>Excavate for and construct reinforced concrete end structure. Including bedding, hardfill surrounds and backfill.  |      |          |             |               |
|      | (a) 600 dia  | m3   | 26.4     | \$ 1,000.00 | \$ 26,400.00  |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 4 - DRAINAGE

| Item | Description   | Unit                     | Quantity | Rate        | Amount       |
|------|---|--------------------------|----------|-------------|--------------|
|      | (b) 750 dia   | m3                       | 9.6      | \$ 1,000.00 | \$ 9,600.00  |
|      | (c) 900 dia   | m3                       | 8.2      | \$ 1,000.00 | \$ 8,200.00  |
|      | (d) 1200 dia  | m3                       | 6.4      | \$ 1,000.00 | \$ 6,400.00  |
|      | (e) 1500 dia  | m3                       | 34.5     | \$ 1,000.00 | \$ 34,500.00 |
|      | (f) Twin 900 dia culverts   | m3                       | 6.0      | \$ 1,000.00 | \$ 6,000.00  |
|      | (g) Twin 1200 dia culverts  | m3                       | 12.4     | \$ 1,000.00 | \$ 12,400.00 |
|      | (h) Twin 1500 dia culverts  | m3                       | 52.5     | \$ 1,000.00 | \$ 52,500.00 |
| 4.12 | INLET AND OUTLET STRUCTURES FOR CROSS ROAD PIPE<br>CULVERTS (TYPE 2)<br>Excavate for and construct reinforced concrete end<br>structure. Including bedding, hardfill surrounds and<br>backfill. |                          |          |             |              |
|      | (a) 750 dia   | Not in Lot 1 Contract 1A |          |             |              |
|      | (b) 1200 dia  | Not in Lot 1 Contract 1A |          |             |              |
| 4.13 | MOUNTABLE GROUTED RIP RAP INLET AND OUTLET<br>STRUCTURES FOR HDPE ACCESS CULVERTS<br>Excavate for and construct 200mm thick sloping grouted<br>rock headwall structure                          |                          |          |             |              |
|      | (a) 450 dia   | m2                       | 101      | \$ 30.00    | \$ 3,030.00  |
|      | (b) 600 dia   | m2                       | 80       | \$ 30.00    | \$ 2,400.00  |
|      | (c) 750 dia   | m2                       | 64       | \$ 30.00    | \$ 1,920.00  |
|      | (d) 900 dia   | m2                       | 63       | \$ 30.00    | \$ 1,890.00  |
|      | (e) Twin 0.75 dia   | m2                       | 18       | \$ 30.00    | \$ 540.00    |
|      | (f) Twin 0.9 dia  | m2                       | 113      | \$ 30.00    | \$ 3,390.00  |
|      | (g) Twin 1.2 dia  | m2                       | 33       | \$ 30.00    | \$ 990.00    |
| 4.14 | BOX DRAIN/CULVERT INLET AND OUTLET STRUCTURES<br>Excavate for and construct reinforced concrete end<br>structure. Including bedding, hardfill surrounds and<br>backfill.                        |                          |          |             |              |
|      | (a) 0.6W x 0.6D   | m3                       | 0.9      | \$ 1,000.00 | \$ 900.00    |
|      | (b) 1.0W x 0.6D   | m3                       | 1.2      | \$ 1,000.00 | \$ 1,200.00  |
|      | (c) 1.2W x 0.8D   | m3                       | 9.6      | \$ 1,000.00 | \$ 9,600.00  |
|      | (d) 1.5W x 1.2D   | m3                       | 15.2     | \$ 1,000.00 | \$ 15,200.00 |
| 4.15 | BOX DRAIN INLET STRUCTURE GRATE<br>Excavate for and construct reinforced concrete end<br>structure  |                          |          |             |              |
|      | (a) 0.6W x 0.6D   | No                       | 1        | \$ 1,000.00 | \$ 1,000.00  |
|      | (b) 1.2W x 0.8D   | No                       | 2        | \$ 2,200.00 | \$ 4,400.00  |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 4 - DRAINAGE

| Item | Description   | Unit                 | Quantity | Rate      | Amount        |
|------|---|----------------------|----------|-----------|---------------|
| 4.16 | CULVERT CASCADE OUTLET STRUCTURE (TYPE 3 OUTLET STRUCTURE)<br>Provisional Sum allowance for construction of grouted rock cascade outlet structures as detailed and directed by the Engineer.                |                      |          |           |               |
|      |   | Not in this contract |          |           |               |
| 4.17 | UNDERCUT<br>Undercut unsuitable material below culvert trench or structure foundation level. Remove undercut material to dump. Include for backfilling undercut with compacted hardfill. (Provisional Item) | m3                   | 200      | \$ 70.00  | \$ 14,000.00  |
| 4.18 | EXCAVATION IN ROCK<br>Extra over to Item 4.17 to allow for excavation in rock. (Provisional Item)   | m3                   | 100      | \$ 40.00  | \$ 4,000.00   |
| 4.19 | STREAM REALIGNMENT AND REGRADING<br>Allow for regrading of stream beds upstream and downstream of proposed drainage structures.   | m3                   | 500      | \$ 30.00  | \$ 15,000.00  |
| 4.20 | KERBS AND CHANNELS<br>(a) Supply composite materials and construct kerb and channel complete  | m                    | 113      | \$ 110.00 | \$ 12,430.00  |
|      | (b) Supply composite materials and construct nib kerb complete  | m                    | 0        | \$ 95.00  | \$ -          |
|      | (c) Supply composite materials and construct Type A dish channel complete. (Provisional Item)   | m                    | 50       | \$ 130.00 | \$ 6,500.00   |
|      | (d) Supply composite materials and construct flush kerb complete  | m                    | 2200     | \$ 50.00  | \$ 110,000.00 |
|      | (e) Extra over item (a) to (c) to construct crossings (driveway and pram) in kerb and channel   | No                   | 3        | \$ 350.00 | \$ 1,050.00   |
| 4.21 | SUBSOIL DRAIN<br>Supply composite materials and construct subsoil drains (Provisional Item)   | m                    | 50       | \$ 57.00  | \$ 2,850.00   |
| 4.22 | GABION BASKETS<br>Supply 2x1x1 gabion baskets and composite materials and construct culvert inlet and outlet headwalls, protection works and retaining walls where directed.                                | m3                   | 40       | \$ 58.50  | \$ 2,340.00   |
| 4.23 | RENO MATTRESS   |                      |          |           |               |



CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 4 - DRAINAGE

| Item                    | Description   | Unit | Quantity | Rate      | Amount                 |
|-------------------------|---|------|----------|-----------|------------------------|
|                         | Supply Reno Mattress and composite materials for scour protection at inlet and outlet structures              | m3   | 41       | \$ 38.55  | \$ 1,580.55            |
| 4.24                    | ROCK RIP RAP  |      |          |           |                        |
|                         | (a) Supply and place rock rip rap at culvert outlets (Provisional Item)                                       | m3   | 200      | \$ 80.00  | \$ 16,000.00           |
|                         | (b) Supply and place 150-250mm rock rip rap in side drains where detailed or directed.                        | m2   | 12,300   | \$ 20.00  | \$ 246,000.00          |
| 4.25                    | GROUTED RIP RAP LINING  |      |          |           |                        |
|                         | Cemented rock rip rap lining for side drains.   | m2   | 1,150    | \$ 38.00  | \$ 43,700.00           |
| 4.26                    | CONCRETE SIDE DRAIN LINING  |      |          |           |                        |
|                         | Concrete lining for side drains (Provisional Item)  | m2   | 100      | \$ 195.00 | \$ 19,500.00           |
| 4.27                    | TOE DRAINS TO FILL BATTERS  |      |          |           |                        |
|                         | Excavate toe drains to fill batters and discharge to water course as directed or detailed. (Provisional Item) | m    | 5425     | \$ 30.00  | \$ 162,750.00          |
|                         | Provisional sum for additional drainage works at intersection   |      |          |           |                        |
| <b>TOTAL BILL No. 4</b> |   |      |          |           | <b>\$ 2,316,643.55</b> |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 5 - PAVEMENTS AND SURFACING

| Item | Description  | Unit                     | Quantity | Rate     | Amount          |
|------|--|--------------------------|----------|----------|-----------------|
| 5.1  | SCARIFYING EXISTING PAVEMENT<br>Scarifying existing village road pavement to a 50mm depth to allow for shaping and compacting granular overlay layer.                                      | m2                       | 1,900    | \$ 2.50  | \$ 4,750.00     |
| 5.2  | SUB GRADE IMPROVEMENT LAYER<br>Supply, place and compact sub grade improvement material as specified. (Provisional Item)   | Not in Lot 1 Contract 1A |          |          |                 |
| 5.3  | SUB BASECOURSE<br><br>Supply, place and compact "Crushed Material" sub-base (a) George Price Highway at Georgeville and Chiquibul Road from Georgeville to Tripartite Junction (14.075 km) | m3                       | 27,300   | \$ 60.00 | \$ 1,638,000.00 |
| 5.4  | BASE COURSE<br>Supply, place and compact base course (a) George Price Highway at Georgeville and Chiquibul Road from Georgeville to Tripartite Junction (14.075 km)                        | m3                       | 32,550   | \$ 60.00 | \$ 1,953,000.00 |
| 5.5  | BITUMINOUS SURFACE TREATMENT<br>PRIME COAT<br>Supply materials and apply MC70 prime coat and blinder (Provisional)   | m2                       | 25,000   | \$ 2.46  | \$ 61,500.00    |
| 5.6  | FIRST COAT SEAL<br>Supply materials and apply first coat bituminous binder and grade 3 chips   | m2                       | 150,350  | \$ 5.96  | \$ 896,086.00   |
| 5.7  | SECOND COAT SEAL<br>Supply materials and apply second coat bituminous binder and grade 1 chips   | m2                       | 128,100  | \$ 7.46  | \$ 955,626.00   |
| 5.8  | PRE COATING OF CHIPS<br>Extra over to Items 5.6 and 5.7 supply binder and precoat chips as specified where directed by the Engineer. (Provisional Item)                                    | m2                       | 278,450  | \$ 0.20  | \$ 55,690.00    |
| 5.9  | CONCRETE PAVEMENT  |                          |          |          |                 |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 5 - PAVEMENTS AND SURFACING

| Item | Description  | Unit                     | Quantity | Rate      | Amount                 |
|------|--|--------------------------|----------|-----------|------------------------|
|      | Provisional Sum allowance of \$130,000.00 for the supply, transport and placement of all materials for concrete pavement as specified including reinforcing and joint construction, as directed by the Engineer. |                          |          |           |                        |
|      |  | Not in Lot 1 Contract 1A |          |           |                        |
| 5.10 | CONCRETE FOOTPATHS<br>Supply materials and construct concrete footpaths  |                          |          |           |                        |
|      | (a) Footpaths on grade   | m2                       | 78       | \$ 125.00 | \$ 9,750.00            |
|      | (b) 1.5m wide footpath over box drain  | m2                       | 44       | \$ 125.00 | \$ 5,500.00            |
|      | (c) 1.6m wide footpath over box drain  | m2                       | 903      | \$ 125.00 | \$ 112,875.00          |
|      | (d) 2.0m wide footpath over box drain  | m2                       | 48       | \$ 125.00 | \$ 6,000.00            |
| 5.11 | RESIDENTIAL ACCESS REINFORCED CONCRETE SLAB<br>Supply materials and construct concrete footpaths   |                          |          |           |                        |
|      | (a) Residential access over 0.8m wide (or wider) box drain   | m2                       | 104      | \$ 125.00 | \$ 13,000.00           |
| 5.12 | COMMERCIAL ACCESS REINFORCED CONCRETE SLAB<br>Supply materials and construct concrete footpaths  |                          |          |           |                        |
|      | (a) Commercial access on grade   | m2                       | 16       | \$ 200.00 | \$ 3,200.00            |
|      | (b) Commercial access over 0.6m wide (or smaller) box drain  | m2                       | 32       | \$ 200.00 | \$ 6,400.00            |
|      | (c) Commercial access over 0.8m wide (or wider) box drain  | m2                       | 33       | \$ 200.00 | \$ 6,600.00            |
|      | <b>TOTAL BILL No. 5</b>  |                          |          |           | <b>\$ 5,727,977.00</b> |

CARACOL ROAD UPGRADE PROJECT

LOT 1, CONSTRUCT 1A

BILL OF QUANTITIES

Bill No. 6 - ROAD MARKING, FURNITURE AND MISCELLANEOUS WORKS

| Item | Description  | Unit | Quantity | Rate         | Amount        |
|------|--|------|----------|--------------|---------------|
| 6.1  | ROAD MARKING PAINT   |      |          |              |               |
|      | (a) Edgeline, 100mm wide continuous white  | m    | 29,060   | \$ 5.25      | \$ 152,565.00 |
|      | (b) Centreline, 100mm wide dashed yeelow (3m stripe, 7m gap)   | m    | 12,510   | \$ 4.25      | \$ 53,167.50  |
|      | (c) White broken edgeline (1m stripe, 2m gap)  | m    | 360      | \$ 4.25      | \$ 1,530.00   |
|      | (d) White hold line (300mm wide)   | m    | 20       | \$ 18.00     | \$ 360.00     |
|      | (e) Yellow stop limit line (300mm wide)  | m    | 126      | \$ 18.00     | \$ 2,268.00   |
|      | (f) Yellow continuous prohibitory line (No overtaking)   | m    | 2,000    | \$ 5.75      | \$ 11,500.00  |
|      | (g) White Painted Stop   | No   | 15       | \$ 800.00    | \$ 12,000.00  |
|      | (h) White painted symbols, letters and numbers   | No   | 4        | \$ 250.00    | \$ 1,000.00   |
|      | (i) Pedestrian crossing markings   | No   | 4        | \$ 1,500.00  | \$ 6,000.00   |
|      | (j) Speed hump marking   | No   | 5        | \$ 1,400.00  | \$ 7,000.00   |
|      | (k) 600mm wide chevron   | m    | 160      | \$ -         | \$ -          |
| 6.2  | SIGNS  |      |          |              |               |
|      | (a) Supply and erect 1 panel single post signs   | No   | 96       | \$ 650.00    | \$ 62,400.00  |
|      | (b) Supply and erect 4 panel single post signs   | No   | 8        | \$ 1,050.00  | \$ 8,400.00   |
|      | (c) Supply and erect 1 panel double post signs   | No   | 11       | \$ 1,250.00  | \$ 13,750.00  |
|      | (d) Supply and erect PW-68 5 post sign   | No   | 14       | \$ 1,500.00  | \$ 21,000.00  |
|      | (e) Provisional Sum allowance of \$15,000.00 for the dismantle, refurbish and re-erection of existing overhead sign gantry structure and attach new signs as directed by the Engineer. | PS   | 1        | \$ 15,000.00 | \$ 15,000.00  |
|      | (f) Remove existing redundant signs  | No   | 50       | \$ 300.00    | \$ 15,000.00  |
|      | (g) Supply and erect WI-8 chevrons   | No   | 112      | \$ 450.00    | \$ 50,400.00  |
| 6.3  | EDGE MARKER POSTS  |      |          |              |               |
|      | Supply and erect edge marker posts   | No   | 326      | \$ 80.00     | \$ 26,080.00  |
| 6.4  | RAISED REFLECTORISED PAVEMENT MARKERS  |      |          |              |               |
|      | Supply and install RRRPM'S   |      |          |              |               |
|      | (a) Yellow   | No   | 720      | \$ 20.00     | \$ 14,400.00  |
| 6.5  | ROADSIDE BARRIERS  |      |          |              |               |
|      | (a) Supply composite materials and construct galvanized steel W-Section guard rails as detailed and specified  | m    | 1365     | \$ 200.00    | \$ 273,000.00 |
|      | (b) Supply and install FHWA approved TL-3 LEADING energy absorbing terminal ends to guardrails   | No   | 26       | \$ 2,500.00  | \$ 65,000.00  |
|      | (c) Extra over for supply of composite materials for transition to and structural connection to bridge barrier Barton Creek Bridge barrier.  | No   | 4        | \$ 2,200.00  | \$ 8,800.00   |

CARACOL ROAD UPGRADE PROJECT

LOT 1, CONSTRUCT 1A

BILL OF QUANTITIES

Bill No. 6 - ROAD MARKING, FURNITURE AND MISCELLANEOUS WORKS

| Item   | Description   | Unit                     | Quantity     | Rate         | Amount       |
|--|---|--------------------------|--------------|--------------|--------------|
| 6.6  | <b>STREET LIGHTS</b>  |                          |              |              |              |
|  | Supply and install street lighting poles, outreaches, fittings, cable, controls and connect to network  |                          |              |              |              |
|  | (a) George Price Highway at Georgeville - install foundation, light pole with single out reach and LED luminaire.   | No                       | 8            | \$ 1,320.00  | \$ 10,560.00 |
|  | (b) Chiquibul Road at Georgeville - install new single out reach with LED luminaire on existing poles.  | No                       | 2            | \$ 1,320.00  | \$ 2,640.00  |
|  | (c) Provisional Sum Allowance of \$80,000.00 for supply and installation of solar powered LED streetlighting for Tripartite Junction as directed by the Engineer. | PS                       | 1            | \$ 80,000.00 | \$ 80,000.00 |
|  | (d) San Antonio - install new out reach with LED luminaire on existing poles.   | Not in Lot 1 Contract 1A |              |              |              |
|  | (e) Cristo Rey - install new out reach with LED luminaire on existing poles.  |                          |              |              |              |
|  | (f) Santa Elena - supply and install new out reach with LED luminaire on existing poles.  |                          |              |              |              |
| (g) Trench 4" ducting with 0.6m cover within berm and construct street lighting power supply   | m   | 300                      | \$ 34.00     | \$ 10,200.00 |              |
| (h) Trench 4" ducting with 0.9m cover within berm and construct street lighting power supply   | m   | 30                       | \$ 49.00     | \$ 1,470.00  |              |
| 6.7  | <b>PEDESTRIAN RAMP</b>  |                          |              |              |              |
| Supply composite materials and construct pedestrian ramp   | No  | 1                        | \$ 10,500.00 | \$ 10,500.00 |              |
| 6.8  | <b>SPEED HUMPS</b>  |                          |              |              |              |
| Supply composite materials and construct speed humps   | No  | 5                        | \$ 7,000.00  | \$ 35,000.00 |              |
| 6.9  | <b>BUS SHELTERS</b>   |                          |              |              |              |
| Provisional Sum Allowance of \$30,000.00 for the supply of all composite materials and construction inputs to provide bus shelters as directed by the Engineer | PS  | 1                        | \$ 30,000.00 | \$ 30,000.00 |              |
| 6.10   | <b>FENCING</b>  |                          |              |              |              |
| (a) Dismantle existing post and wire fences and remove from site or stockpile for re-use   | m   | 2800                     | \$ 5.00      | \$ 14,000.00 |              |
| (b) Dismantle existing fence types other than post and wire and remove from site or stockpile for re-use   | m   | 950                      | \$ 8.00      | \$ 7,600.00  |              |

CARACOL ROAD UPGRADE PROJECT

LOT 1, CONSTRUCT 1A

BILL OF QUANTITIES

Bill No. 6 - ROAD MARKING, FURNITURE AND MISCELLANEOUS WORKS

| Item                    | Description   | Unit                     | Quantity | Rate          | Amount                 |
|-------------------------|---|--------------------------|----------|---------------|------------------------|
|                         | (c) Re-erect post and wire fence line using stockpiled materials. Including for new sundry items (nails, staples etc.)  | m                        | 900      | \$ 5.00       | \$ 4,500.00            |
|                         | (d) Supply composite materials and construct post and wire fence (Provisional Item)   | m                        | 1900     | \$ 30.00      | \$ 57,000.00           |
|                         | (e) Provisional Sum allowance of \$100,000.00 for the supply of composite materials and the construction of fences, other than post and wire, to match and tie into existing forms of fence being either removed or partially removed | PS                       | 1        | \$ 100,000.00 | \$ 100,000.00          |
| 6.11                    | CONCRETE PEDESTRIAN ACCESS SLABS<br>(a) Double slab   | No                       | 3        | \$ 5,200.00   | \$ 15,600.00           |
| 6.12                    | WATERMAIN RELOCATIONS<br>(a) Provisional Sum allowance of \$500,000.00 for the provision of a new 8" watermain from Santa Elena to Cristo Rey Village as directed by the Engineer   | Not in Lot 1 Contract 1A |          |               |                        |
|                         | (b) Provisional Sum allowance of \$120,000.00 for the relocation of watermains in Georgeville Vilalge, as directed by the Engineer.   | PS                       | 1        | \$ 120,000.00 | \$ 120,000.00          |
|                         | (c) Provisional Sum allowance of \$300,000.00 for the relocation of watermains in San Antonio Village, as directed by the Engineer.   | Not in Lot 1 Contract 1A |          |               |                        |
|                         | (d) Provisional Sum allowance of \$160,000.00 for the relocation of watermains in San Antonio and Tripartite Junction, as directed by the Engineer.   | Not in Lot 1 Contract 1A |          |               |                        |
|                         | (e) Provisional Sum allowance of \$120,000.00 for the relocation of watermains between Tripartite Junction and the Seven Mile Progresso Turnoff, as directed by the Engineer.   | PS                       | 1        | \$ 120,000.00 | \$ 120,000.00          |
|                         | (f) Provisional Sum allowance of \$100,000.00 for the relocation of watermains in Cristo Rey Village, as directed by the Engineer.  | Not in Lot 1 Contract 1A |          |               |                        |
|                         |   |                          |          |               |                        |
| <b>TOTAL BILL No. 6</b> |   |                          |          |               | <b>\$ 1,439,690.50</b> |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 7 - CONSTRUCTION OF BARTON CREEK BRIDGE

| Item | Description  | Unit | Quantity | Rate         | Amount       |
|------|--|------|----------|--------------|--------------|
| 7.1  | Main Works<br>Demolition of existing bridge to construct new bridge        | 1    | LS       | \$ 15,000.00 | \$ 15,000.00 |
| 7.2  | Supply, construct reinforced concrete base for South Abutment              |      |          |              |              |
|      | a) concrete  | m3   | 83       | \$ 350.00    | \$ 29,050.00 |
|      | b) steelwork   | t    | 4.244    | \$ 5,500.00  | \$ 23,342.00 |
|      | c) formwork  | m2   | 44       | \$ 50.00     | \$ 2,200.00  |
| 7.3  | Supply, construct reinforced concrete base for North Abutment              |      |          |              |              |
|      | a) concrete  | m3   | 83       | \$ 350.00    | \$ 29,050.00 |
|      | b) steelwork   | t    | 4.244    | \$ 5,500.00  | \$ 23,342.00 |
|      | c) formwork  | m2   | 44       | \$ 50.00     | \$ 2,200.00  |
| 7.4  | Supply, construct reinforced concrete wall and wingwall for South Abutment |      |          |              | \$ -         |
|      | a) concrete  | m3   | 96       | \$ 350.00    | \$ 33,600.00 |
|      | b) steelwork   | t    | 6.058    | \$ 5,500.00  | \$ 33,319.00 |
|      | c) formwork  | m2   | 120      | \$ 50.00     | \$ 6,000.00  |
| 7.5  | Supply, construct reinforced concrete wall and wingwall for North Abutment |      |          |              | \$ -         |
|      | a) concrete  | m3   | 96       | \$ 350.00    | \$ 33,600.00 |
|      | b) steelwork   | t    | 6.058    | \$ 5,500.00  | \$ 33,319.00 |
|      | c) formwork  | m2   | 120      | \$ 50.00     | \$ 6,000.00  |
| 7.6  | Supply, transport and install inverted Tee Beam                            | m    | 40       | \$ 600.00    | \$ 24,000.00 |
| 7.7  | Supply, construct plinth and shear key                                     |      |          |              |              |
|      | a) concrete  | m3   | 16       | \$ 350.00    | \$ 5,600.00  |
|      | b) steelwork   | t    | 2        | \$ 5,500.00  | \$ 11,000.00 |
|      | c) formwork  | m2   | 68       | \$ 50.00     | \$ 3,400.00  |
| 7.8  | Supply, construct reinforced concrete deck slab                            |      |          |              |              |
|      | a) concrete  | m3   | 96       | \$ 350.00    | \$ 33,600.00 |
|      | b) steelwork   | t    | 6.058    | \$ 5,500.00  | \$ 33,319.00 |
|      | c) formwork  | m2   | 120      | \$ 50.00     | \$ 6,000.00  |

CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES  
 Bill No. 7 - CONSTRUCTION OF BARTON CREEK BRIDGE

| Item                    | Description   | Unit | Quantity | Rate        | Amount               |
|-------------------------|---|------|----------|-------------|----------------------|
| 7.9                     | Provide and place pedestrian metal rails. Include for all galvanized tubing, bolt assembly and welding. All welds are to be painted with two coats of cold galvanized paints. | m    | 32       | \$ 300.00   | \$ 9,600.00          |
| 7.1                     | Supply, construct reinforced concrete settlement slab   |      |          |             |                      |
|                         | a) concrete   | m3   | 16       | \$ 350.00   | \$ 5,600.00          |
|                         | b) steelwork  | t    | 1        | \$ 5,500.00 | \$ 5,500.00          |
|                         | c) formwork   | m2   | 20       | \$ 50.00    | \$ 1,000.00          |
| 7.11                    | Provide and place expansion joint. Include for the supply and placing of Sikasil 728 SL and backon rod  | m    | 24       | \$ 80.00    | \$ 1,920.00          |
| 7.12                    | Provide and place engineered backfill to abutments to level off settlement slab   | m3   | 16       | \$ 60.00    | \$ 960.00            |
| <b>TOTAL BILL No. 7</b> |   |      |          |             | <b>\$ 411,521.00</b> |



**CARACOL ROAD UPGRADE PROJECT**

**LOT 1, CONSTRUCT 1A**

**BILL OF QUANTITIES**

**Bill No. 8 - DAYWORKS**

| Item       | Description   | Unit      | Quantity | Rate        | Amount               |
|------------|---|-----------|----------|-------------|----------------------|
| <b>8.1</b> | <b>LABOUR</b>   |           |          |             |                      |
| 8.1.1      | Foreman   | Hr        | 200      | \$ 15.00    | \$ 3,000.00          |
| 8.1.2      | Drive (Operator)  | Hr        | 400      | \$ 7.50     | \$ 3,000.00          |
| 8.1.3      | Skilled Labourer  | Hr        | 400      | \$ 10.00    | \$ 4,000.00          |
| 8.1.4      | Unskilled Labourer  | Hr        | 800      | \$ 5.65     | \$ 4,520.00          |
| 8.1.5      | Tradesman   | Hr        | 400      | \$ 10.00    | \$ 4,000.00          |
| 8.1.6      | Surveyor  | Hr        | 200      | \$ 25.00    | \$ 5,000.00          |
| 8.1.7      | Technician  | Hr        | 200      | \$ 17.00    | \$ 3,400.00          |
|            | <b>Subtotal for Dayworks: 1 Labour</b>                          |           |          |             | <b>\$ 26,920.00</b>  |
| <b>8.2</b> | <b>MATERIALS</b>  |           |          |             |                      |
| 8.2.1      | Petrol (Gasoline)   | US Gallon | 400      | \$ 10.44    | \$ 4,176.00          |
| 8.2.2      | Diesel Oil  | US Gallon | 800      | \$ 9.65     | \$ 7,720.00          |
| 8.2.3      | Lubricant   | Kg        | 200      | \$ 6.50     | \$ 1,300.00          |
| 8.2.4      | Bitumen Cut-back MC-70  | t         | 4        | \$ 1,800.00 | \$ 7,200.00          |
| 8.2.5      | Bitumen MC 3000   | t         | 4        | \$ 1,700.00 | \$ 6,800.00          |
| 8.2.6      | Road Paint  | l         | 200      | \$ 23.00    | \$ 4,600.00          |
| 8.2.7      | Portland cement   | t         | 4        | \$ 485.00   | \$ 1,940.00          |
| 8.2.8      | Mild steel reinforcement  | t         | 2        | \$ 2,300.00 | \$ 4,600.00          |
| 8.2.9      | High yield steel reinforcement                                  | t         | 8        | \$ 2,420.00 | \$ 19,360.00         |
| 8.2.10     | Fine Aggregate for concrete                                     | m3        | 20       | \$ 60.00    | \$ 1,200.00          |
| 8.2.11     | Coarse aggregate for concrete                                   | m3        | 20       | \$ 82.00    | \$ 1,640.00          |
| 8.2.12     | Concrete class C30  | m3        | 20       | \$ 335.00   | \$ 6,700.00          |
| 8.2.13     | Structural steel RSJ, UB etc                                    | t         | 4        | \$ 2,400.00 | \$ 9,600.00          |
| 8.2.14     | Granular material for sub base                                  | m3        | 80       | \$ 40.00    | \$ 3,200.00          |
| 8.2.15     | Crushed aggregate for sub base                                  | m3        | 200      | \$ 46.00    | \$ 9,200.00          |
| 8.2.16     | Crushed aggregate for basecourse                                | m3        | 200      | \$ 60.00    | \$ 12,000.00         |
| 8.2.17     | Crushed aggregate for road surface chips                        | m3        | 40       | \$ 65.00    | \$ 2,600.00          |
| 8.2.18     | Gabion Baskets (2x1x1) Cage only                                | ea        | 20       | \$ 400.00   | \$ 8,000.00          |
| 8.2.19     | Reno Mattress (2x1x0.3) Cage only                               | ea        | 20       | \$ 300.00   | \$ 6,000.00          |
|            | <b>Subtotal for Dayworks: 2 Materials</b>                       |           |          |             | <b>\$ 117,836.00</b> |
| 8.2.20     | Add 15 percent of subtotal for Contractors overhead, profit etc |           |          |             | <b>\$ 17,675.40</b>  |
| <b>8.3</b> | <b>CONTRACTOR EQUIPMENT</b>                                     |           |          |             |                      |
| 8.3.1      | Bulldozer 70kW  | Hr        | 20       | \$ 150.00   | \$ 3,000.00          |
| 8.3.2      | Bulldozer 150kW   | Hr        | 20       | \$ 220.00   | \$ 4,400.00          |
| 8.3.3      | Bulldozer 250kW   | Hr        | 20       | \$ 350.00   | \$ 7,000.00          |
| 8.3.4      | Motor Grader 110kW  | Hr        | 40       | \$ 165.00   | \$ 6,600.00          |
| 8.3.5      | Motor Grader 250kW  | Hr        | 40       | \$ 275.00   | \$ 11,000.00         |
| 8.3.6      | Hydraulic Excavator 10-14t                                      | Hr        | 40       | \$ 175.00   | \$ 7,000.00          |
| 8.3.7      | Hydraulic Excavator 15-24t                                      | Hr        | 40       | \$ 175.00   | \$ 7,000.00          |

CARACOL ROAD UPGRADE PROJECT

LOT 1, CONSTRUCT 1A

BILL OF QUANTITIES

Bill No. 8 - DAYWORKS

| Item   | Description   | Unit | Quantity | Rate      | Amount               |
|--------|---|------|----------|-----------|----------------------|
| 8.3.8  | Hydraulic Excavator 25-35t                            | Hr   | 20       | \$ 175.00 | \$ 3,500.00          |
| 8.3.9  | Track-type Loader 80kW                                | Hr   | 40       | \$ 125.00 | \$ 5,000.00          |
| 8.3.10 | Road Stabiliser 15-24t                                | Hr   | 20       | \$ 130.00 | \$ 2,600.00          |
| 8.3.11 | Screening Plant 100t/hr                               | Hr   | 20       | \$ 150.00 | \$ 3,000.00          |
| 8.3.12 | Wheel Loader 60kW                                     | Hr   | 20       | \$ 110.00 | \$ 2,200.00          |
| 8.3.13 | Wheel Loader 130kW                                    | Hr   | 40       | \$ 150.00 | \$ 6,000.00          |
| 8.3.14 | Air Compressor 5000 1/min                             | Hr   | 10       | \$ 60.00  | \$ 600.00            |
| 8.3.15 | Generator 15kW  | Hr   | 40       | \$ 50.00  | \$ 2,000.00          |
| 8.3.16 | Generator 150kW                                       | Hr   | 40       | \$ 90.00  | \$ 3,600.00          |
| 8.3.17 | Motor Blower  | Hr   | 20       | \$ 75.00  | \$ 1,500.00          |
| 8.3.18 | Self Propelled Road Painting Machine                  | Hr   | 20       | \$ 65.00  | \$ 1,300.00          |
| 8.3.19 | Bitumen Distributor                                   | Hr   | 20       | \$ 130.00 | \$ 2,600.00          |
| 8.3.20 | Chip Spreader 5m3                                     | Hr   | 20       | \$ 120.00 | \$ 2,400.00          |
| 8.3.21 | Dump Truck 15t  | Hr   | 20       | \$ 85.00  | \$ 1,700.00          |
| 8.3.22 | Tipper Truck 15t                                      | Hr   | 40       | \$ 85.00  | \$ 3,400.00          |
| 8.3.23 | Self Propelled Vibrating Roller 8t                    | Hr   | 40       | \$ 110.00 | \$ 4,400.00          |
| 8.3.24 | Self Propelled Vibrating Roller 12t                   | Hr   | 40       | \$ 130.00 | \$ 5,200.00          |
| 8.3.25 | Self Propelled Pneumatic Roller over 12t              | Hr   | 20       | \$ 115.00 | \$ 2,300.00          |
| 8.3.26 | 3 Wheel Steel Roller 10-12t                           | Hr   | 20       | \$ 140.00 | \$ 2,800.00          |
| 8.3.27 | Vibrating Plate Compactor 0.4t                        | Hr   | 20       | \$ 40.00  | \$ 800.00            |
| 8.3.28 | Jackhammer 25kg                                       | Hr   | 20       | \$ 75.00  | \$ 1,500.00          |
| 8.3.29 | Pick-up 1.7t  | Hr   | 40       | \$ 40.00  | \$ 1,600.00          |
| 8.3.30 | Crushing Plant 50t/hr                                 | Hr   | 20       | \$ 250.00 | \$ 5,000.00          |
| 8.3.31 | Concrete Mixer 12kW 0.5m3                             | Hr   | 40       | \$ 45.00  | \$ 1,800.00          |
| 8.3.32 | Concrete Vibrator 35mm diameter                       | Hr   | 40       | \$ 12.00  | \$ 480.00            |
| 8.3.33 | Concrete Vibrator 63mm diameter                       | Hr   | 60       | \$ 15.00  | \$ 900.00            |
| 8.3.34 | Concrete Truck 12t                                    | Hr   | 20       | \$ 170.00 | \$ 3,400.00          |
| 8.3.35 | Truck Mounted Crane 10t                               | Hr   | 20       | \$ 150.00 | \$ 3,000.00          |
| 8.3.36 | Truck Mounted Crane 50t                               | Hr   | 20       | \$ 360.00 | \$ 7,200.00          |
| 8.3.37 | Pile Driving Hammer                                   | Hr   | 20       | \$ 350.00 | \$ 7,000.00          |
| 8.3.38 | Self Propelled Water Tanker 6,000 litre               | Hr   | 20       | \$ 110.00 | \$ 2,200.00          |
| 8.3.39 | Self Propelled Fuel Tanker 6,000 litre                | Hr   | 20       | \$ 120.00 | \$ 2,400.00          |
| 8.3.40 | Water Pump 50mm Diameter Centrifugal                  | Hr   | 20       | \$ 20.00  | \$ 400.00            |
| 8.3.41 | Water Pump 100mm Diameter Centrifugal                 | Hr   | 20       | \$ 35.00  | \$ 700.00            |
| 8.3.42 | Arc Welding Equipment                                 | Hr   | 20       | \$ 70.00  | \$ 1,400.00          |
| 8.3.43 | Oxyacetylene Equipment                                | Hr   | 20       | \$ 50.00  | \$ 1,000.00          |
|        | <b>Subtotal for Dayworks: 3 Contractors Equipment</b> |      |          |           | <b>\$ 142,880.00</b> |
| 1      | LABOUR  |      |          |           | \$ 26,920.00         |
| 2      | MATERIALS   |      |          |           | \$ 135,511.40        |
| 3      | CONTRACTORS EQUIPMENT                                 |      |          |           | \$ 142,880.00        |

CARACOL ROAD UPGRADE PROJECT  
LOT 1, CONSTRACT 1A  
BILL OF QUANTITIES  
Bill No. 8 - DAYWORKS

| Item | Description  | Unit | Quantity | Rate | Amount        |
|------|--|------|----------|------|---------------|
|      |  |      |          |      |               |
|      | TOTAL BILL No. 8 Dayworks (Provisional Item) ( Carried forward to Bill No. 9 Summary of Bills) |      |          |      | \$ 305,311.40 |

**CARACOL ROAD UPGRADE PROJECT  
 LOT 1, CONSTRUCT 1A  
 BILL OF QUANTITIES**

| <b>Summary of Bill of Quantities</b> |   |                         |
|--------------------------------------|---|-------------------------|
| <b>Bill No.</b>                      | <b>Description</b>                                      | <b>Amount \$BZE</b>     |
| 1                                    | Preliminary and General                                 | \$ 3,834,050.00         |
|                                      | <b><u>LOT 1, CONTRACT 1A</u></b>                        |                         |
| 2                                    | Earthworks  | \$ 2,710,000.00         |
| 3                                    | Quarry Development and Operation                        | \$ 150,000.00           |
| 4                                    | Drainage  | \$ 3,358,606.10         |
| 5                                    | Pavements and Surfacing                                 | \$ 5,678,758.00         |
| 6                                    | Road Marking, Furniture & Miscellaneous Works           | \$ 2,134,935.00         |
|                                      | <b>Subtotal</b>   | \$ 17,866,349.10        |
| 7                                    | Dayworks  | \$ 305,311.40           |
|                                      | <b>TOTAL BILL AMOUNTS FOR CONTRACT 1A</b>               | <b>\$ 18,171,660.50</b> |
|                                      | <b><u>LOT 1, CONTRACT 1A</u></b>                        |                         |
| 2                                    | Earthworks  | \$ 5,236,750.00         |
| 3                                    | Quarry Development and Operation                        | \$ 105,000.00           |
| 4                                    | Drainage  | \$ 2,316,643.55         |
| 5                                    | Pavements and Surfacing                                 | \$ 5,727,977.00         |
| 6                                    | Road Marking, Furniture & Miscellaneous Works           | \$ 1,439,690.50         |
| 7                                    | Construction of Barton Creek Bridge                     | \$ 411,521.00           |
|                                      | <b>Subtotal</b>   | \$ 14,826,061.05        |
| 8                                    | Dayworks  | \$ 305,311.40           |
|                                      | <b>TOTAL BILL AMOUNTS FOR CONTRACT 1A</b>               | <b>\$ 15,131,372.45</b> |
|                                      | <b>GRAND TOTAL BILL AMOUNTS FOR LOT 1 CONTRACT (1A)</b> | <b>\$ 33,303,032.95</b> |
|                                      | Adjustment Amount (refer 7.1.11 of Preamble to Bills)   |                         |
|                                      | Contingency Sum (to be included in Grand Total)         | \$ -                    |
|                                      | Contingency Sum 10% of Total Bill Amounts               | \$ 3,330,303.30         |
|                                      | <b>GRAND TOTAL</b>                                      | <b>\$ 36,633,336.25</b> |

**CONTRACTOR'S TECHNICAL PROPOSAL**

CERTIFICATE NO: 8370



JUL 12 2011

*Handwritten signature*  
REGISTRAR GENERAL

**BELIZE COMPANIES AND CORPORATE AFFAIRS REGISTRY  
BELMOPAN, BELIZE**

**THE BUSINESS NAMES ACT**

**CHAPTER 247 OF THE LAWS**

**CERTIFICATE OF REGISTRATION**

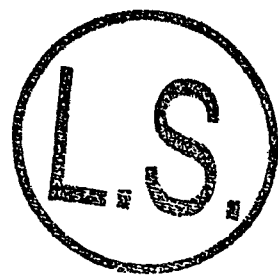
**BELIZE ROADWAY CONSTRUCTION**

I HEREBY CERTIFY THAT a statement furnished by JACOB BANMAN and TIMMY BANMAN both of #10 Swasey Street, Belmopan, Cayo District, and CARL BANMAN of #11 Trio Street, Belmopan, Cayo District, BELIZE pursuant to Section 5 (1) of the above-mentioned Act was registered on the 1<sup>st</sup> day of April, 2004.

GIVEN under my hand and the seal of the Belize Companies and Corporate Affairs Registry this 1<sup>st</sup> day of April, 2004.

*Handwritten signature: Ross*

**C. ROSS  
DEPUTY REGISTRAR  
COMPANIES AND CORPORATE AFFAIRS**



*2/4/04.*

*Handwritten signature*



FEB 17 2010

*Patricia Rodriguez*  
REGISTRAR GENERAL

**BELIZE COMPANIES AND CORPORATE AFFAIRS REGISTRY  
BELMOPAN, BELIZE**

**CERTIFICATE OF INCORPORATION**

IN THE MATTER OF THE COMPANIES ACT, Chapter 250 of the  
Substantive Laws of Belize, Revised Edition 2000;

AND IN THE MATTER of the application for registration and for a  
Certificate of Incorporation BELIZE ROADWAY CONSTRUCTION LTD.

IT IS HEREBY CERTIFIED THAT

**BELIZE ROADWAY CONSTRUCTION LTD.**

is this day registered and incorporated as a limited liability company  
pursuant to the provisions of the aforesaid Companies Act.

GIVEN under my hand and the seal of the Belize Companies and Corporate  
Affairs Registry this 28<sup>th</sup> day of November, 2008.

*Patricia Rodriguez*  
PATRICIA RODRIGUEZ (MRS.)  
FOR REGISTRAR GENERAL  
AND REGISTRAR OF COMPANIES



*28*  
*28-11-08*

BELIZE:

THE COMPANIES ACT, CHAPTER 250  
OF THE LAWS OF BELIZE, REVISED  
EDITION 2000

COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION

OF

BELIZE ROADWAY CONSTRUCTION LTD.

PRELIMINARY

1. Subject as hereinafter provided and except where the same are inconsistent with these Articles of Association, the Regulations in Table "A" in the first Schedule to the Companies Act, Chapter 250 of the Laws of Belize Revised Edition, 2000 (hereinafter called Table "A"), shall apply to this company.

*Rev 1008517*

*2008 12.00  
Rev 605051  
28/11/08*

*19.  
20  
28.11.08*

*NOV 27 2010*  
*[Signature]*  
REGISTRAR GENERAL



BUSINESS

2. The Business of the Company shall be transacted, managed and controlled from Belize.

PRIVATE COMPANY

3. The Company is a Private Company within the meaning of Section 122 of the Companies Act, Chapter 250 of the Laws of Belize Revised Edition, 2000 and accordingly:-
- (a) The right to transfer shares is restricted in manner hereinafter provided.
  - (b) The number of members for the time being of the Company is not to exceed fifty; provided that where two or more persons hold one or more share in the Company jointly they shall for the purposes of this paragraphs be created as a single Member.
  - (c) Any invitation to the public to subscribe for any share or debentures of the Company is prohibited and clause 5 Table "A" shall not apply.
  - (d) The company shall not have power to issue share warrants to bearer and Clause 35 to 40 (inclusive of Table "A" shall not apply.
4. The share capital of the Company is 10,000 divided into 10,000 shares at 1.00 each.
5. The shares shall be under the control of the Directors who may by resolution allot, grant options over or otherwise dispose of the

same to such persons on such terms and conditions, and at such time as they may think fit, subject nevertheless to the provisions herein contained.

6. The Company shall have a first and paramount lien upon all shares registered in the name of each Member (whether solely or jointly with others) and upon the proceeds of sale thereof for his debts, liabilities and engagements solely to or with the Company (whether the period for the payment fulfillment or discharge shall have actually arrived or not), and such lien shall extend to all dividends from time to time declared in respect of such shares. Unless otherwise agreed, the registration of a transfer of shares shall operate as a waiver of the Company's lien if any, on such shares. Clause 9 of Table "A" shall construed accordingly.

#### CALLS ON SHARES

7. In clause 12 of Table "A" the words "except so far as may be otherwise agreed between the Company and any Member in the case of shares held by him" shall be inserted immediately after the words "provided that".

#### TRANSFER OF SHARES

8. The Directors may decline to register any transfer of shares save and except where the proposed transfer has been approved by the Company in General Meetings. Clause 20 of Table "A" shall be construed accordingly.

## PROCEEDINGS AT GENERAL MEETINGS

9. In Clause 49 of Table "A" the words "fourteen days' notice" shall be substituted for the words "seven days' notice" but nevertheless a General Meeting may with the consent in writing of all the Members entitled to receive notice of General Meeting to be convened on such shorter notice than fourteen days and in any manner they think fit. Any such consent may be given on behalf of a corporation holding shares in the Company by any person duly appointed to act as its representative or proxy for the meeting so convened.
10. A resolution in writing signed by all Members of the Company or their duly appointed attorneys shall (except where a meeting is prescribed by Statute) be as valid and effectual as if it had been passed at a meeting of the Members duly convened and held. Any such resolution may consist of several documents in the like form each signed by one or more of the Members or their attorneys duly appointed or proxies and signature in the case of a corporate body which is a Member shall be sufficient if made by a Director thereof or by its duly authorized attorney or representative entitled to vote at meetings of the Company.
11. The quorum of a General Meeting shall be seven members entitled to receive notice of General Meetings present in person. 6 votes are considered a decision by majority the Chairman shall have a casting vote in case of a tie.

12. The Chairman of the Board of Directors shall preside at every general meeting, but if at any meeting he shall not be present within 30 minutes after the time appointed for holding the same or shall be unwilling to preside, the Members present shall choose some Director or if no Director be present or if all the Directors present decline to take the chair, they shall choose some Member present to be Chairman of the meeting Clause 53 and 54 of Table "A" shall not apply.
13. It shall not be necessary to give any notice of an adjourned meeting or of the business to be transacted at an adjourned meeting and Clause 55 of Table "A" shall be modified accordingly.

#### VOTE OF MEMBERS

14. A poll may be demanded by any Member present in person or by proxy. Clause 56 of Table "A" shall be modified accordingly and further the said Clause 56 shall be construed as if the words "or not carried by a particular majority" were inserted therein after the word "lost".
15. Clause 60 of Table "A" shall not apply. Subject to the rights of or restrictions on any shares issued upon special conditions in regards to voting, on a show of hands every Member entitled to vote present in person or by proxy shall have one vote and upon a poll every member present in person or by proxy shall have one vote for every share held by him.

16. A person shall be entitled to act as a proxy although he is not entitled to be present and vote at the meeting at which he acts as proxy. Proxies may be given by cablegram and any proxy so given shall be in the following form or in any other form which the Board may approve.

"I, the undersigned ....."

"hereby authorize ....."

"of ....."

"to vote for me ....."

"at the ..... Meeting of the"

"above company ....."

"to be held on ....., 2006..... and"

"at any adjournment thereof"

"Dated at ....., this..... day of ....." "2006"

Any proxy given by cablegram shall be valid for the purposes of these presents if such cablegram is received at the Registered Office or such other place as may be specified in the notice convening the Meeting at any time prior to the time appointed for holding such Meeting. Clause 65, 66 and 67 of Table "A" shall be modified accordingly.

DIRECTORS

17. Clause 68 of Table "A" shall not apply and unless and until otherwise determined by the Company in General Meeting, the

Directors shall be not less than two in number. The first Directors shall be: - appointed by the subscribers to the Memorandum and Articles of Association.

18. The Directors shall be paid such remuneration for their services as the Company may from time to time decide. The Directors shall also be entitled to be paid their traveling and hotel expenses of attending and returning from Board Meetings or otherwise incurred while engage on the business of the Company and any Director who resides abroad for any purposes of the Company shall (unless otherwise expressly resolved by the Company in General Meetings) receive such extra remuneration by way of salary, percentage of profits or otherwise as the Directors may determine, which shall be charged as part of the Company's ordinary working expenses.
19. Clause 69 and 70 of Table "A" shall not apply.
20. The Directors may exercise all the powers of the Company to borrow or raise money and to mortgage or charge its undertaking property and uncalled capital and issue debentures and other securities. Clause 73 of Table "A" shall not apply.
21. In Clause 75 of Table "A" the words "and every director present at any meeting of directors of committee of directors shall sign his name in a book to kept for that purpose" shall be deleted.

SEAL

22. The Seal of the Company shall not be affixed to any instrument except by the authority of a resolution of the Directors and in the presence of at least two Directors or one Director and the Secretary or such other persons or the Directors may appoint for the purpose, and such Directors or Director and Secretary or other person as aforesaid shall sign every instrument to which the Seal is so affixed in their presence. Clause 76 of Table "A" shall not apply.

DISQUALIFICATION AND REMOVAL OF DIRECTORS

23. Clause 77 of Table "A" shall not apply and the office of Directors shall be vacated if the Directors:-
- (a) Voluntarily retires; or
  - (b) Becomes bankrupt or insolvent; or
  - (c) If found lunatic or becomes of unsound mind; or
  - (d) Cease to be a Director by virtue of the provisions of Section 74 of the Companies Act Chapter 250 of the Laws of Belize, 2000.
24. Clause 78 and 79 of Table "A" shall not apply. All of the Directors shall retire from office at each ordinary General Meeting of the Company. Each such Director shall be deemed to remain in office until his place is filled up or he shall be deemed to have been re-elected in accordance with Clause 82 of Table "A".

PROCEEDINGS OF DIRECTORS

25. Clause 88 of Table "A" shall not apply and the quorum necessary for the transaction of the business of Directors shall be fixed by the Directors and unless and until so fixed shall be two Directors. It shall not be necessary to give notice of a meeting of Directors to any Director who is for the time being absent from Belize. A resolution in writing signed by all the Directors for the time being in Belize shall be as valid and effectual as if it has been passed at a meeting of the Directors duly convened and held may consist of several documents in the like form each signed by one or more of the Directors.
  
26. A Director may enter into contracts or arrangements, or have dealings with the company, and shall not be disqualified from office thereby, nor shall he be liable to account to the Company for profit arising out of any such contract, arrangement, or dealing to which he is a party, or in which he is interested by reason of his being at the same time a Director of the company, provided that such Director discloses at a meeting of the Directors at or before the time when such contract, arrangement or dealing is determined upon, his interest therein, or if such interest is subsequently acquired, provided that he on the first occasion possible disclose at a meeting of the Directors the fact that he has acquired such interest. Subject to making such disclosure, any Director may vote in regard to my contract, arrangement or dealing in which he is interested or upon any matter arising thereout. A general notice



that a Director is a member of any firm, or Director or Member of any company and to be regarded as interested in all transactions with such firm or company shall not be necessary to give any special notice relating to any particular transaction with firm or company. A Director interesting in any contract or arrangement shall be counted in a quorum, notwithstanding his interest at any meeting dealing with such contract or arrangement.

27. A Director of the Company may accept office as a director of any company promoted by or in which the company is interested, and may subscribe for, guarantee the subscription of or otherwise acquire shares in any such company, and shall be in nowise accountable for any profits or benefits so obtained and in like manner any person or a director of any company concerned in the promotion of the company, or interest in the company, may be a Director of the company, and may acquire an interest in the company, and shall not be accountable for any profits or benefits so obtained.
28. A director may hold any other form of office or place of profit in the Company, except that of auditor, in conjunction with his Directorship, and may be appointed thereto upon such terms as to remuneration, tenure of office and otherwise as may be arranged by the Directors.
29. Each Director may from time to time nominate (1) any other Director, or (2) any person approved by the Board to act a alternate Director in his place during his absence from Board Meetings or

from Belize and on such appointment being made the alternate Director shall (except as to remuneration and the power to appoint an alternate) be subject in all respects to the terms and conditions existing with reference to the other Directors and the Director nominating him shall not be responsible for his acts and defaults. An alternate Director shall vacate office if and when the Director nominating him vacates office if and when the Director nominating him vacates office as a Director or removes him from office. Every nomination and removal under this clause shall be effected in writing under the hands of the Directors making the same and deposited at the registered office of the company. Any Director acting as alternate shall have an additional vote for each Director for whom he acts as alternate and any other person than a Director shall have one vote for each Director for whom the acts as alternate.

#### CAPITALISATION OF PROFITS

30. The company in General Meeting may at any time at and from time to time by resolution declare that it is expedient to capitalize any sum or sums (1) forming part of the undivided profits standing to the credit of the Company's reserve funds, or (2) being undivided profits in the hands of the company not required for the payment of any dividend which at the date of the resolution is due on any Preference Shares or Stock of the Company and that the same be set free for distribution accordingly and may direct the appropriation of any such sum or sums among the shareholders by

applying the same in paying up shares, debentures or debenture stock of the company, or in any one or more of such ways, for distribution among the shareholders as fully paid and the board shall give effect to such resolution, particular of paid-up shares or debentures of any other company or in any one or more of such ways, and the Directors shall give effect to such resolution.

31. When any difficulty arises in regard to any distribution under the last preceding Articles, the Directors may settle the same as think expedient, and in particular may issue fractional certificates or may ignore fractions, and may fix the value for distribution of such specific assets or any part thereof and may determine that cash payments shall be made to any Member upon the footing of the value so fixed in order to adjust the rights of all parties, and may vest any such specific assets in trustees upon such trusts for the persons entitled to participate in the dividend or in the appropriation or distribution of such sum or sums as may seem expedient to the Directors. Where requisite, a proper contract shall be filled in accordance with the Act, and the Directors may appoint any person to sign such contract on behalf of the persons entitled to the dividend or to such appropriation and distribution and such appointment shall be effective.

#### ACCOUNTS

32. In Clause 108 of Table "A" the words "Fourteen days" shall be substituted for the words "Seven Days".

### NOTICES

33. Any notice or documents may be served by the Company on any Member either personally or by sending it through the post in a pre-paid letter addressed to such Member at his registered address as appearing in the Register of Members.
34. Any Member described in the register by an address not within Belize shall be entitled to have any such notice or document served upon him by the Company by airmail post.
35. Any notice or other document, if served by post, shall be deemed to have been served on the day on which it is posted and in proving such service it shall be sufficient to prove that the letter containing the notice or document was properly addressed, stamped and put into the post office. Clause 110 and 111 of Table "A" shall not apply.
36. Clause 114 of Table "A" the words "except those members who (having no registered address within Belize) have not supplied to the company an address within the country for the giving of notice to them" shall be deleted.

### WINDING UP

37. In a winding up the Liquidator may, with the sanction of an Extraordinary Resolution of the contributories, divide among the

contributories in specie the whole or any part of the assets of the company and may, with the like sanction, vest the whole or part of such assets in trustees upon such trusts for the benefit of the contributories as the Liquidator, with the like sanction shall think fit.

#### INDEMNITY

38. Save and except so far as the provisions of this Articles shall be avoided by any provisions of Law, the Directors, Auditors and other officers for the time of the company, and the Trustees (if any) for the time being acting in relation to any of the affairs of the company, and every of them and every of their executors and administrators shall be indemnified and secured harmless out of the assets and profits of the Company from and against all actions, costs, charges, losses, damages and expenses which they or any of them, theirs or any of their executors or administrators shall or may incur or sustain by or by reason of any act done, concurred in or admitted in or about the execution of their duty or supposed duty in their respective office or trusts, except such (if any) as they shall incur or sustain or by through their own willful neglect or default respectively, and none of them shall be answerable for the acts, receipts, neglects or default of the other or others of them or of any bankers or other persons with whom any monies, or effects belonging to the company shall may be lodged or deposited for safe custody or for joining in any receipt for the sake of conformity, or for the insufficiency of, or any deficiency in, any

security upon which any monies of or belonging to the company shall be placed out or invested, or for any other less misfortune or damage which may happen in the execution of their respective offices or trusts, or in relation thereto, except the same shall happen by or through their own willful neglect or default respectively.

39. In the interpretation of these presents and Table "A" the following words and expressions have the following meaning, unless excluded by the subject or context, viz:-

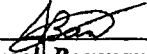
"In writing" mean; written, printed, typed or produced by any other substitute for writing, or partly one and partly another.

"The Directors" means the Directors of the Company present at a duly convened meeting of Directors of the Company at which a quorum is present.

*We the several persons whose names and addresses are subscribed are desirous of being formed into a Company, in pursuance of this Memorandum of Associations.*

NAMES, ADDRESSES, AND DESCRIPTION OF SUBSCRIBERS

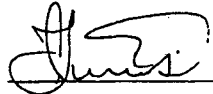
|   |             | Number of<br>Shares taken<br>By each<br>Subscriber |
|---|-------------|--|
| <br>_____<br><b>Timmy Banman</b><br>Cotton Tree Village<br>Cayo District | Businessman | 1  |

|   |             |   |
|---|-------------|---|
| <br>_____<br><b>Jacob Banman</b><br>#13 Doyles Delight<br>Belmopan City<br>Cayo District | Businessman | 1 |
|---|-------------|---|

Total number of shares taken 2

DATED the 25<sup>th</sup> day of Nov, 2008

Witness to the above signatures: -

  
\_\_\_\_\_  
#3 Pacific St.  
Bma City, Cayo Dist

BELIZE:

THE COMPANIES ACT, CHAPTER 250  
OF THE LAWS OF BELIZE, REVISED  
EDITION 2000

COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION

OF

BELIZE ROADWAY CONSTRUCTION LTD

1. The name of the Company is **Belize Roadway Construction Ltd.**
2. The registered office of the company will be situated at Entrepreneur Street, Belmopan City, Cayo District, Belize.
3. The objects for which the Company is established are :-
  - (1) To carry on the trade or business of builders, engineers, architects and contractors for construction and demolition works of any kind including roads, streets, highways, sewers, drains, pavements and culverts.
  - (2) To carry on all or any of the business of dealers, miners, quarrymen, developers and workers in sand, gravel, stones, clay, lime, aggregates, cement, concrete, minerals, marl and any other materials used in road construction or otherwise.

RUH 1008517

CC \$500.00  
Reg \$50.00  
ST \$12.00  
FF \$10.00

KOM# 605051  
28/11/08

20

12. 28 11 08

JAN 27 2008

*Frederick (General)*



- (3) To import, export, manufacture, purchase, lease or acquire all implements heavy equipment, machinery, vehicles, tractors, bull dozers, cranes, graders, compactors, and other machinery used in road construction or otherwise.
- (4) To purchase, lease, rent, exchange, or otherwise acquire for the purpose of company any estates, lands, buildings, easement or other interest in or over land for the purpose of draining, paving, building, constructing, planting, farming, leasing, selling, exchanging, granting easement or privileges, improving and delveloping or for any other purpose, business or activity which may seem capable of being conveniently carried on in connection with any activity of the company or calculated to enhance the value of any of the company's property or rights.
- (5) To amalgamate or enter into contract either alone or jointly as sub-contractors, partnership or any arrangement for sharing of profits, union of interest, co-operation, joint venture, reciprocal concession, or otherwise with any person or company carrying on or engaged in or about to carry on or engage in any business or transaction which the company is authorized to carry on or engage in or any business or transaction capable of being conducted so as directly or indirectly benefiting the company.
- (6) To establish, operate and manage a business consultancy firm in Belize that will provide services to the private and public sectors within and without Belize.
- (7) To provide financial, marketing and management services to all types of business, government, quasi-government, charitable and non-governmental organizations within and without Belize.
- (8) To erect and construct houses, buildings or works of every description on

any land of the company, or upon any other lands or property, and to pull down, rebuild, enlarge, alter and improve existing houses, buildings or works thereon, to convert and appropriate any such and into an for roads, streets, squares, gardens and pleasure grounds and other conveniences, and generally to deal with and improve the property of the company.

- (9) To purchase or otherwise acquire, erect, maintain, reconstruct, and adapt any offices, workshops, mills, plant, machinery and other things found necessary or convenient for the purpose of the company.
- (10) To prepare application for development concessions; Annual Reports thereon; Business Plans; Financial, Marketing and other business strategies.
- (11) To purchase or otherwise acquire all or any part of the business, property and liabilities or any company, society, partnership or person, formed for all or any part of the purposes within the objects of this Company, or possessed of property suitable for the purposes of this company, and to conduct and carry on, or liquidate and wind up, any such business.
- (12) To apply for and take out, purchase, or otherwise acquire any designs, trade marks, patents, patent rights or inventions, copyrights or secret processes, which may be useful for the company's objects, and to use, exercise, develop, or grant licenses in respect of, or otherwise turn to account the same.
- (13) To adopt such means of making known the products and services of the company as may seem expedient, and in particular by advertising in any media, or by the purchase, exhibition, or reproduction of works of art, or by the publication of books and pictures, or by granting concessions, prizes, rewards and goods free or at reduced process, or in such other

manner, whether similar to the above or not, as the Company may deem desirable.

- (14) To apply or, secure, acquire by grant, legislative enactment, assignment, transfer, purchase, or otherwise, and to exercise, carry out, and enjoy any charter, licence, power, authority, franchise, concession, right, or privilege, which any government or authority or any corporation or other public body may be empowered to grant.
- (15) To construct, build, improve, alter, maintain, develop, enlarge, remove, replace, repair and to work, manage, carry out, or control any house, buildings, works, factories, mills, road-ways, tramways, railways, branches or sidings, bridges, reservoirs, water courses, wharves, warehouses, electric works, businesses, shops, stores and other works and conveniences which may seem calculated directly or indirectly to advance the company's interests, and to contribute to, subsidize, or otherwise assist or take part in the construction, improvement, maintenance, development, working, management, carrying out, or control thereof.
- (16) To manufacture, buy, sell, and generally deal in, any plant, machinery, tools, goods or things or any description, which in the opinion of the company may be conveniently dealt with by the company in connection with any of its objects..
- (17) To let on lease or on hire the whole or any part of the real and personal property of the company on such terms as the company shall determine.
- (18) To pay all costs, charges and expenses incurred or sustained in or about the promotion and establishment of the company, or which the company shall consider to be in the nature of preliminary expenses including therein the cost of advertising, commissions for underwriting, brokerage, printing and stationary.

- (19) To draw, accept, and make, and to indorse, discount and negotiate, bills of exchange, promissory notes, bills of lading, debentures and other negotiable or transferable instruments.
- (20) To borrow, raise money or secure obligations (whether of the company or any other person) in such manner as the company may think fit and in particular by the issue of debentures, debenture stock, (perpetual or terminable), bonds, mortgages, charges, liens or any other securities, founded or based upon all or any of the property and rights of the company (both present and future) including its uncalled capital, or without any such security; and to purchase, redeem or pay off any such securities.
- (21) To receive money or loan, with or without allowance of interest thereon, and to guarantee the obligations and contracts of customers and others.
- (22) To lend and advance money or give credit to any person or company; to guarantee and give guarantees or indemnities for the payment of money or the performance of contracts of obligations by any person, firm, or company; to secure or undertake in any way the repayment of money lent or advanced to or the liabilities incurred by any person, firm or company; and otherwise to assist any person, firm or company.
- (23) To invest and deal with the money of the company not immediately required in such manner, other than in the shares of the company, as may from time to time be thought fit.
- (24) To take, otherwise acquire, hold and sell shares, debentures or other securities of any company, society or undertaking.
- (25) To provide for the welfare of persons in the employment of the company, or formerly in the employment of the company or its predecessors in

business, and the wives, widows, and families of such person, by grants or money, pensions, allowances, payments towards insurance or other payments, and to form, subscribe to, or scientific, national or other institutions, associations, funds, trusts, and conveniences or objects, which shall have any moral or other claims to support or aid by the company by reason of the nature or the locality of its operations or otherwise.

- (26) From time to time to subscribe or contribute to any charitable, benevolent or useful object of a public character.
- (27) To sell, dispose of, or transfer the business, property and undertakings of the company or any part thereof, for any consideration which the company may see fit to accept and in particular for shares, stock, debentures or other securities of any other company whether or not having objects altogether or in part similar to those of the company.
- (28) To take or hold mortgages; liens, and charges to secure payment of the purchase price, or any unpaid balance of the purchase price, of any part of the Company's property of whatsoever kind sold by the Company, or any money due to the Company from purchasers and others and to accept stock or shares in, or the debentures, mortgage debentures or other securities of any company in payment or part payment for any services rendered or for any sale made to or debt owing from any such company.
- (29) To issue and allot fully or partly said shares in the capital of the Company in payment or part payment of any real or personal property purchased or otherwise acquired by the Company or any services rendered to the Company.
- (30) To establish, promote, or otherwise assist, any company or companies for the purpose of acquiring or taking over all or any of the property, rights,

and liabilities of the Company, or for any purpose which may seem directly or indirectly calculated to benefit the Company and to place or guarantee the placing of, underwrite, subscribe for or otherwise acquire all or any part of the shares, debentures or other securities of any such other company.

- (31) To distribute in specie or otherwise as may be resolved any assets of the Company among its members and, particularly the shares, debentures or other securities of any other company formed to take over the whole or any part of the assets or liabilities of this Company, but so that no distribution amounting to a reduction of capital shall be made without the sanction required by law.
- (32) To do all or any of the matters hereby authorized in any part of the world either alone or in conjunction with, or as factors, trustees or agents for, any other company or person, or by or through factors, trustees or agents, and to procure the Company to be registered or recognized in any country or place outside Belize.
- (33) To do all such other things as are incidental or conducive to the attainment of the objects and the exercise of the powers of the Company or any of them.
- (34) To carry on any trade or business whatsoever which can in the opinion of the Board of Directors, be advantageously carried on by the company in connection with or as ancillary to the business or general business of the company.

AND IT IS HEREBY DECLARED that the objects set forth in any sub-clause of this clause shall not be restrictively construed but the widest interpretation shall

be given thereto, and they shall be regarded as independent objects and shall not, except when the context expressly so requires, be in any way limited to or restricted by reference to or inference from any other object or objects set forth in such sub-clause or from the terms of any other sub-clause or by the name of the Company, but may be carried out in as full and ample a manner and construed in as wide a sense as if each of the said sub-clauses defined the objects of a separate and distinct company. Accordingly, none of such sub-clauses or the object or objects therein specified or the powers thereby conferred shall be deemed subsidiary or ancillary to the objects or powers mentioned in any other sub-clause, but the Company shall have full power to exercise all or any of the powers and to achieve or to endeavor to achieve all or any of the objects conferred by and provided in anyone or more of the said sub-clauses.

4. The liability of the members is limited.

5. The share capital of the Company is Bze. \$10,000.00 divided into 10,000 shares of Bze. \$1 each, with power for the Company to increase or reduce the said capital, and to issue any part of its capital, original or increased, with or without any preference, priority, or special privilege, or subject to any postponement of rights, or to any conditions or restrictions; and so that unless the conditions of issue shall otherwise expressly declare, every issue of shares, whether declared to be preference or otherwise, shall be subject to the power hereinbefore contained.

We the several persons whose names and addresses are subscribed are desirous of being formed into a company pursuant to this Memorandum of Association, and we respectively agree to take the number of shares in the capital of the company set opposite to our respective names.

NAMES, ADDRESSES, AND DESCRIPTION OF SUBSCRIBERS

|   |             | Number of Shares taken By each subscriber |
|---|-------------|---|
| <u>Timmy Banman</u><br>Cotton Tree Village<br>Cayo District                 | Businessman | 1   |
| <u>Jacob Banman</u><br>#13 Doyles Delight<br>Belmopan City<br>Cayo District | Businessman | 1   |
| Total number of shares taken  |             | 2   |

DATED the 25<sup>th</sup> day of Nov, 2008

Witness to the above signatures: -

[Signature]  
#3 Pacific St.  
Bmp City, Cayo Dist



# ROAD CONSTRUCTION METHOD STATEMENT

The following Construction Method Statement covers the procedures to be adopted for general construction activities that will be executed during the implementation of the Upgrading of the Caracol Road Project

## Activity 1: Survey Operation

### *SURVEY METHODOLOGY*

The following sequence of activities are to be undertaken during the execution of the survey work in connection with the road construction: proceed with the implementation of a Traverse Survey to ensure that all setting out data are correct, establish Temporary Bench Mark Survey markers, Set out Center Line and extent of works survey markers, Cross Section Survey and updating of Drawings.

### *Resources*

#### **Man Power**

- 1 Surveyor
- 1 Nos. Total Station
- 2 Nos. Survey Staff
- 1 Nos. Level Instrument

#### **Equipment & Hand Tools**

- 2 Nos. Tape (30m)
- 2 Nos. Tape (5m)
- 3 Nos. Walkies Talkie

## Activity 2: Traffic Safety Management & Control

### *Safety Awareness Meetings*

Safety awareness meetings will be conducted once a week to brief the work force in the safety prevention measures. Each survey group should be well notified to follow specified safety instructions such as "Barricading Boards", safety cones, safety clothing and flagmen will be deployed to control the traffic flow during working time. The survey team should have practical knowledge to adjust the following specified instructions that will meet safety requirements.

The Client will be advised to inform traffic users of the area of the start of works, the order of works and the dates when certain parts of the Highway will be affected. Users should also be advised of the use of heavy equipment in the area, open excavations and material stockpiles which though will be cordoned off, pose a road users.

## ***Resources***

### **Man Power**

10 Flagmen

### **Equipment & Hand Tools**

24 Nos. Traffic Cone

6 Nos. Safety Sign Board

6 Nos. Handheld two-way radio

## ***Operating Procedure***

- Site investigation is to be carried out for safety precautions prior to commencement of the work, in order to display relevant signboards.
- "Men at work 75m - 100m ahead" signboards would be placed on both left hand side of the road.
- 25 m away from men at work sign Narrow Road/one lane traffic sign would be placed in order to notify the drivers with regard to road situation.
- Working area will be corded off with traffic cones to indicate work for the oncoming traffic to see on both sides.
- "One way traffic ahead" signboards would be placed 90m ahead of working area in order to notify oncoming drivers.
- Traffic controllers would be deployed on both sides in order to control "one way traffic".
- Photographs would be taken to disseminate and maintain traffic safety records.
- Radio communication system would be used where normal communication is impossible.
- After completion of the work, safety cones and barricade boards has to be removed accordingly.
- General Traffic flow has to be defined in work areas where temporary diversions will be required.

In addition to following above safety procedures, the use of the following would be adopted to minimize accidents on site:

- Safety helmets, traffic safety vests, boots, dust mask & gloves will be provided.
- Warning signboards would be displayed throughout the site.
- First aid facilities would be provided.
- Safety officer has to visit the site daily and required safety measures will be adopted at site. In addition, work discrepancies will be discussed in the following safety meeting.

## **Activity 3: Borrow Excavation**

### ***Borrow Excavation***

The borrow excavation shall consist of the operations such as site clearing, stripping of

the overburden and stockpiling. Excavation would only be done where those sites have been approved as borrow sites to be used in the construction work.

### ***Resource Allocation***

#### **Man power**

1 No Supervisor,  
Unskilled labors,  
Operators

#### **Equipment**

Back-hoe/Excavator  
Loaders,  
Dump trucks

### ***Quality Control Procedures***

#### **Sampling and testing**

Samples of sub-base and base material would be taken from the borrow location and those samples would be placed in a polythene bag with an identification tag. All required tests would be carried out in the materials testing laboratory to confirm that those materials are in compliance with the specifications. After appropriate test results are received and approved, excavation would be done and those materials would be stockpiled at the site for use.

No materials will be allowed to be incorporated in the construction work until the required tests are completed and specifications satisfied.

#### **Inspection Check list**

To ensure that all quality control activities area being performed with the expected quality, an inspection check list would be filled by the Quality Control Engineer for the borrow excavation during preconstruction and construction. The inspection checks list shall include the specific requirements, safety and environmental measures.

#### **Dimension Control**

In case of the excavation of borrow materials, the designated limits of the borrow site are to be marked to maximize the quality of the borrow materials and to avoid mixing with unsuitable materials.

#### ***Methodology***

##### **Clearing of the borrow site**

1. The location and dimensions of the borrow pits would be identified as approved by the Engineer.
2. All ordinary vegetation, shrubs, stumps and roots would be removed by a manual

means or using any other suitable equipment within the approved borrow area.

3. All unsuitable materials removed during site clearance will be stockpiled at a site and then they would be disposed to a suitable disposal location or burned at the site as approved by the Engineer.

### **Stripping of the overburden**

1. The overburden would be removed up to the required depth by using approved equipment and those materials would not be allowed to mix with other materials classified as suitable for filling.

2. All unsuitable materials would be disposed to a suitable disposal location by means of tipper trucks.

### **Excavation**

1. Borrow excavation would be carried out using a Backhoe or excavator and would be properly stock piled with well-drained facilities. The material from the borrow pits would be blasted, ripped and/or excavated in a manner that ensures the effective breaking down of the material in the borrow pit before it is loaded.

2. Rippable materials, which tend to break into large blocks, would be cross-ripped.

3. Borrow materials would be tested to ensure they meet the requirements before use.

4. The transportation of borrow material will be done using dump trucks.

## **Activity 4: Clearing and Grubbing**

### ***Introduction***

This Method Statement provides the details of materials, the equipment, the procedure and relevant documents related to the clearing and grubbing activities, including the quality control verifications, the measurement verifications, disposing of garbage and debris, disposing of valuable trees, disposing of branches at disposal sites, disposing of logs and uprooting of roots to be implemented.

### ***Location of Works***

The location of the clearing and grubbing works will be limited to selected areas bound within the Right of Way (ROW) as instructed by the Engineer. These works may applicable alternatively, as required to locations outside the ROW (i.e. borrow pits, disposal areas etc.)

### ***Resource Allocation***

#### **Man power**

Site Engineer (1)

Supervisor (1)

Unskilled Laborers (2)

Flagmen (2)

Operators (2)

**Equipment & Tools**

Backhoes, and/or Dozer, and/or Motor Grader  
Dump Trucks/ Tractors  
Chainsaws and axes  
Traffic Control Equipment as required and other minor materials

***Methodology***

The Site Supervisor will confirm with the Engineer that appropriate consultation and approvals have been conducted with neighboring land owners/users as required before the commencement of clearing activities. Garbage, trees, vegetation and debris will be removed with the smallest equipment required and with the requisite safety protocols to reduce the intrusion and safety risk to residents of the area. Disposal will be at approved locations and in accordance with the Department of the Environment regulations.

**Activity 5: Drainage**

***Drainage Channel Excavation***

These drainage works consist of the excavation of side road channels, drains and ditches as located within the road right of way and as shown on the Drawing or as instructed by the Engineer. All drainage shall be provided by constructing, shaping, finishing or backfilling where necessary in accordance with the required alignment, lines levels, grades and cross sections.

***Resource Allocation***

**Man Power and Equipment**

Site Engineer  
Supervisor  
Flagmen  
Labours  
Operators

**Equipment & Tools**

Excavator  
Back-hoe  
Loader  
Dump trucks (15 tons)  
Compacting rollers  
Level & tripod

## ***Methodology***

### **Setting Out**

The setting out would be carried out in the area where the Engineer's approval is given for channel excavation. Levels of excavation would be marked by the surveyor using pegs for the establishment of profiles.

### **Excavations and Shaping**

- A. The set out area would be subjected for the excavation with machinery or in manual manner conformity with designed line and levels.
- B. The shape of the drain would be maintained to satisfy the typical sections issued for the construction in accordance with the design drawings.
- C. All suitable materials for embankment construction removed from excavations would be re-used in Embankment construction or any other filling as specified to fill. SEP
- D. Materials deemed not suitable for embankment fill would be disposed of to an approved disposal site.
- E. Any area requiring backfilling to be done to form earth drains must be done using approved filling material as instructed by the Engineer

## **Activity 6: Concrete Roundabout, Sidewalks, Medians, Road Furniture and Culverts**

### **Construction**

#### ***Introduction***

It is anticipated that all cylindrical culverts will be purchased locally from an approved culvert supplier.

#### ***Resources***

##### **Man Power**

- Site Engineer
- Surveyor
- Survey helpers
- Supervisor
- Skilled & Unskilled laborers

##### **Equipment/ Tools**

- Back Hoe Loader
- Excavators
- Water Tankers
- Concrete Mixer
- Dump Truck

Rammer Compactor  
Leveling Instrument  
Water Pump  
2 Nos. Poker vibrators  
Wheel Barrows  
Hand Tools

## ***Quality Control Procedure***

### **A. Material sampling and testing**

The Site Engineer would arrange for the samples from required materials such as concrete and soil according to the specified frequency and locations. In concrete, one set of cubes would be made as specified under the specification. At least one sample would be taken on each day that a particular grade is used. Crushing strength of the concrete cubes would be tested for the samples at ages of 7 and 28 days. Each sample would be identified by identification No and it is displayed on the test cubes and a same Identification Number would be included in the sample register. The identification tag includes, the date of cast, age of test and date of test to be performed.

### **B. Quality Control**

To ensure that all activities being performed with the expected quality, an inspection check list would be filled by the Quality Control personnel during construction and post construction.

### **C. Dimension Control**

All specified lengths, widths and heights would be properly maintained during construction and all these dimensions would be checked with the inspection checklist. In case of identifying the undesirable changes in specified dimensions and even beyond the specified tolerances, the particular work would be reworked before the subsequent work.

### **D. Methodology of Work**

Where two lanes of traffic can be accommodated, concrete pavement, culvert installation and pedestrian crossing construction would be carried out for only half of the structure first and the second part would follow the finish of the first part.

### **E. Removal of Existing Structures**

Existing structures would be removed with prior approval of the Engineer and as per the Technical Specification.

### **F. Excavation**

1. This work consists of the necessary excavation for foundation of medians, pedestrian crossings, culverts, head walls, wing walls and other structures.

2. Necessary diverting of streams, construction and subsequent removal of necessary coffer dams, shoring, dewatering, pumping and removal of any obstructions for placing the foundation, backfilling, clearing the site of debris and the disposal of excess excavated materials would be also included in this work schedule.
3. Prior to commencement of excavation, the limit of excavation would be set out as shown in the drawings and directed by the Engineer.
4. All excess soil and other material from the excavation including logs, boulders etc. would be removed from the site and disposed to the locations approved by the Engineer.

### **G. Structural & Concrete Work**

1. Prior to commencement structural and concrete work, the excavated areas would be compacted and backfilled as required with suitable material to the required level and compaction given by the Engineer as necessary.
2. Concrete trial mixing, sampling and testing would be carried out as mentioned in Technical Specification and accordance with the BS 1881 standard and subsequently all the test results would be submitted to the Engineer for approval.
3. Subsequently form work of base and re-bar would be carried out according to the construction drawings and the base would be made with a grade as instructed by the Engineer and concrete would be thoroughly compacted by vibration.
4. Concrete would be placed in such a manner as to avoid segregation by means of chutes and the displacement of reinforcing bars and would be spread in horizontal layers where practicable.
5. All concrete surfaces would be kept wet for 7 days after placing concrete.
6. Structures would be constructed by using concrete as per the details given by the Engineer.
7. All the exposed surfaces would be plastered with cement mortar if required.
8. Culvert Pipes would be placed before end structure construction.
9. Joints in concrete would either be cut or formed as required with the approved joint sealant applied thereafter.

## **Activity 7: Road Sub-base and Base Construction**

### ***Introduction***

Sub grade preparation shall be carried out using selected materials where the exposed surface is adequately prepared to receive the sub-base then base.

### ***Resources***

#### **Man Power**

- Site Engineer
- Supervisor
- Flagmen (2 minimum)
- Unskilled labors
- Operators



## **Equipments & Tools**

Back-hoe or Excavator as required  
Loader  
Water pump  
Dump trucks  
Level Instrument  
Camber board/ Straight edges  
Roller  
Motor Grader

## ***Quality Control Procedures***

### **A. Sampling and testing**

Suitable materials would be employed in the preparation of sub grade as those materials have been classified to use as sub grade materials by the all preliminary tests done on it. Sampling of these materials would be made in a manner to identify easily their status of test and all the necessary details would be entered to the sample register. In case of placing these materials, the specified layer thickness and degree of compaction for each layer would be achieved. Field density test would be carried out in case of checking the degree of compaction according to the method stipulated in the relevant specifications.

### ***B. Inspection Check list***

To ensure that the all activities being performed with the expected quality, an inspection check list would be filled by the person in charge for this work in case of pre-construction, during construction.

### ***C. Dimension Control***

Preparation of sub grade would be carried out according to the designed cross sections. The required depth and length of the excavation would be properly maintained during construction and those requirements would be checked with the inspection checklist.

### ***D. Methodology***

- If the exposed layer of soil unsuitable for sub grade, these layers would be excavated up to the required depth by using a back-hoe or an excavator and the required levels of the excavation would be controlled by the surveyor.
- Selected suitable material would be placed and compacted in successive layers by using rammers or vibrating rollers to a minimum depth of 300 mm.
- If the exposed layer of soil suitable for the sub grade, the layer would be thoroughly compacted by using vibrator rollers or rammers until reach the required compaction.
- The top 300 mm sub grade layer in cut areas would be compacted to not less than 98% of the maximum dry density of the material as determined by BS 1377 stated in the technical specifications. Water would be sprayed while compacting for achieving the

required compaction.

- The surface of the finished sub grade would be neat and have the required form, super elevation, levels, grades and cross section.

## **Activity 8: Prime and Tack coat**

### ***Prime and Tack Coat Application***

Prime coat would act as a protective measure for the Aggregate Base, prior to laying surface courses. It enhances the bond between two layers.

Tack Coat would be applied over existing pavement so that to provide bond between two layers.

### ***Resources***

#### **Man Power**

Site Engineer  
Supervisor  
Flagmen (2 minimum)  
Unskilled labors  
Operators  
Lab Technicians & Helpers  
Surveyor  
Survey Helpers  
Operators, Skilled & Unskilled laborers

#### **Equipments & Tools**

Water Bowser  
Brooms/ Brushes  
Air Compressor  
Distributor  
Level Instruments

### ***Material***

#### **A. Prime Coat**

The prime coat shall consist of MC – 70 Cut-Back bitumen.

#### **B. Aggregates**

The surface dressing material shall be crushed rock or river stone having grading limit, hardness, Average Least Dimension and other key requirements as specified in contract specification.

### ***Methodology***

#### **Prime Coat**

1. The prime coat would be applied over the prepared approved aggregate base course which was laid in accordance to the designed cross sections levels, given by the

surveyor.

2. Dense graded aggregate base should be done on a prepared and accepted sub-base course or other roadbed in accordance with the specification and specific requirements of the contract in conformity with the required lines, levels, grades, dimensions and cross sections.
3. Quality of the work would be secured through the careful control of the materials as same as the workmanship.
4. Adequate safety control measures would be provided to prevent from any damage or danger to the public and the personnel involved in the work.

### **Preparation of Surface**

1. Prior to application of prime coat the base would be brushed to remove all dust, loose particles and other extraneous material and the surface would be moistened with water just before priming.
2. Where local irregularities in the existing surface, the surface would be brought to uniform contour by patching with fine particles of aggregate base course or an asphalt mixture to be approved by the Engineer.
3. Where the mix is laid over cement concrete pavements, joints and cracks would be cleaned and filled with bituminous material as approved, and any unevenness of the surface would be corrected as required. A prime coat would then be applied to the surface.

## **Activity 9: Bituminous Surfacing**

### ***Introduction***

This method statement covers all the procedures to be adopted for the application of first and second coat Surface Dressing Treatment Pavement and HMA consisting of furnishing all materials including prime coat, tack coat binder and stone chippings on an approved base course.

### ***Resources***

#### **Man Power**

- Site Engineer
- Supervisor
- Flagmen (2 minimum)
- Unskilled labors
- Operators
- Lab Technicians & Helpers
- Surveyor
- Survey Helpers
- Operators
- Skilled & Unskilled laborers

## **Equipments & Tools**

Pneumatic Roller  
Chip Spreader  
Water Bowser  
Asphalt Distributor  
Dump Trucks  
Mechanical Sweeper  
Brooms/ Brushes  
Air Compressor  
Distributor  
Level Instruments

## ***Material***

1. The material would be composed basically of graded crushed aggregates of specified size i.e  $\frac{1}{2}$ " and  $\frac{3}{4}$ ", asphalt material, tack coat (MC3000) and prime coat (MC-70) or HMA
2. The several mineral constituents would be sized and uniformly graded to ensure that the wearing course aggregates meets the Average Least Dimension (ALD) requirements and Hardness test as specified under the contract.

## ***Methodology***

1. Before construction of asphalt pavement for the specified section of road, the road formation should have been properly constructed to lines and level and be protected against erosion.
2. The Double Surface Dressing Treatment (DSDT) or HMA pavement should be done on a prepared and accepted sub-base and base course roadbed in accordance with the specification and specific requirements of the contract in conformity with the required lines, levels, grades, dimensions and cross sections.
3. Quality of the work would be secured through the careful control for the materials.
4. Adequate safety control measures would be provided to prevent from any damage or danger to the public and the personnel involved in the work.

## ***Preparation of Existing Surface***

1. Prior to application of prime coat the base would be brushed to remove all dust, loose particles and other extraneous material and the surface would be moistened with water just before priming.
2. Where local irregularities in the existing surface, the surface would be brought to uniform contour by patching with an asphalt mixture to be approved by the Engineer.
3. Where the mix is laid over cement concrete pavements, joints and cracks would be cleaned and filled with bituminous material as approved, and any unevenness of the surface would be corrected as required. A prime coat would then be applied to the surface.

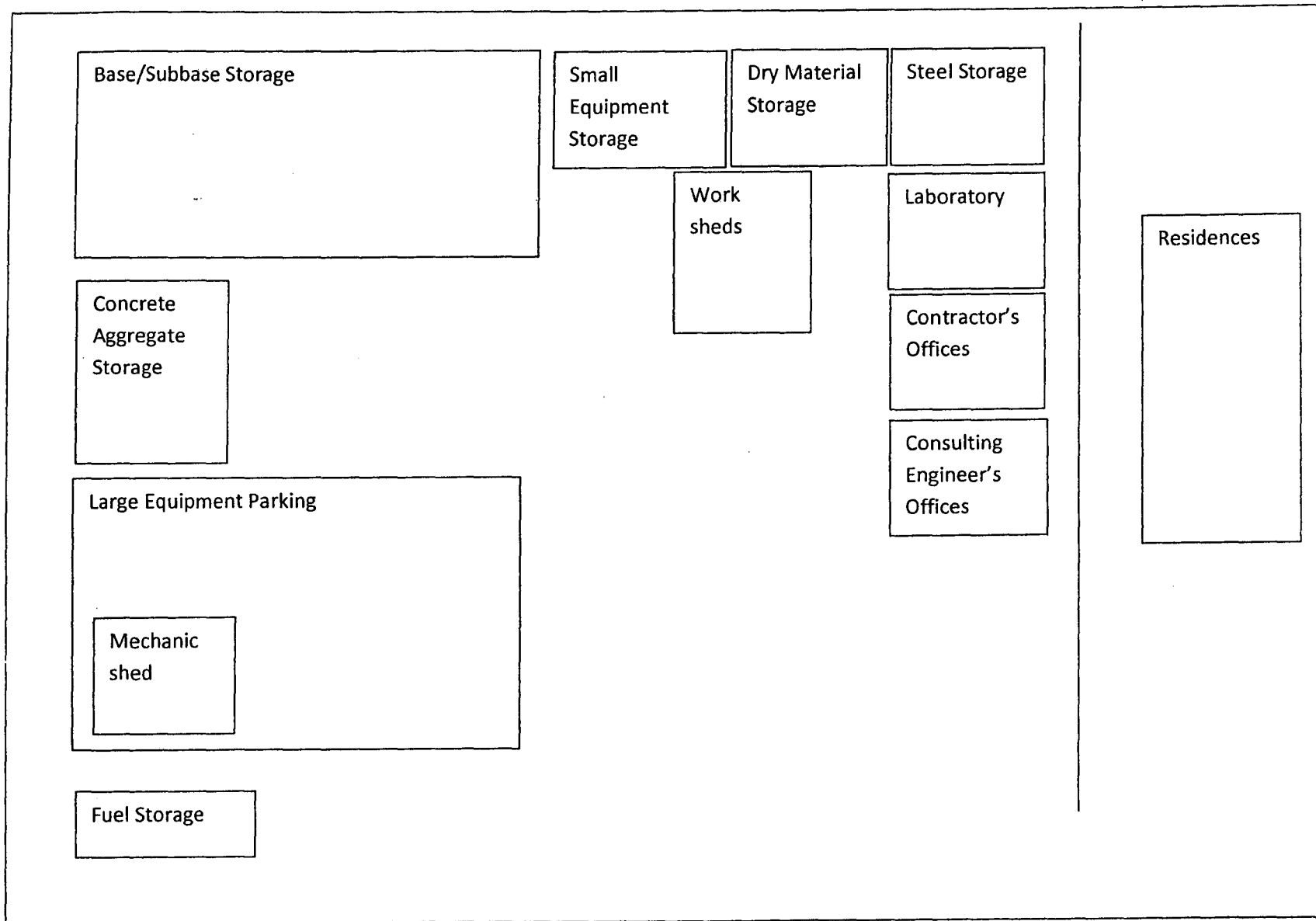
### ***Weather Limitations***

1. Asphaltic mixtures would be placed only when the surface is dry, when the weather is not rainy or will not soon be rainy and prepared road bed is in a satisfactory condition.
2. For use in an emergency such as rain, chilling wind or unavoidable delay enough tarpaulin covers would be used for the purpose of covering or protecting any material that may have been dumped and not spread.

### ***Limitations due to Equipment***

1. No work would be carried out when there is insufficient equipment for hauling, spreading, compaction and finishing or insufficient labor to ensure progress at a rate compatible with the output of the mixing plant to ensure a continuous paving operation.
2. Trucks for hauling aggregates must be clean, secure and dust free.
3. Loading and transporting would be such that spreading, compacting and finishing would all be carried out during daylight hours only.
4. The equipment for spreading and finishing would be approved mechanical, self powered distributors and chip spreaders that are capable of meeting the application rates for bitumen and aggregates.
5. After application of both bitumen and aggregates the proper tire rollers must be available to provide the compaction as required for the aggregates.
6. Adequate traffic control must be provided during and after of the application of each layer of DSDT or HMA.
7. All equipment used in the application of bitumen and aggregates must be tested and certified that it meets the application rate as required for stones and bitumen.

# Site Organization



Belize Roadway Construction Ltd  
 Caracol Road Upgrade Lot 1A  
 PROPOSED WORK SCHEDULE

| ID | Task Name   | Start       | Qtr 2, 2 | Qtr 3, 2 | Qtr 4, 2 | Qtr 1, 2 | Qtr 2, 2 | Qtr 3, 2 | Qtr 4, 2 | Qtr 1, 2 | Qtr 2, 2 | Qtr 3, 2 | Qtr 4, 2 | Qtr 1, 2 | Qtr 2, 2 |
|----|---|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1  | <b>Mobilization Activities - Award Notification to Start of Works On Site</b> | Thu 8/1/19  |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2  | Award Notification  | Thu 8/1/19  |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3  | Provision of Securities and Insurances  | Thu 8/1/19  |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 4  | Approval of revised work schedule   | Thu 8/1/19  |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 5  | Contract Signature & Kick Off Meeting   | Thu 8/29/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 6  | Equipment Mobilization  | Fri 8/30/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 7  | Approval of Site Organization   | Fri 8/30/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 8  | Notification of Road Users of Work Schedule                                   | Fri 9/13/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 9  | Start of Works on Site  | Thu 9/26/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 10 |   |             |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 11 | <b>Construction Works</b>   | Fri 9/27/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 12 | <b>GENERAL ITEMS</b>  | Fri 9/27/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 13 | Site Establishment  | Fri 9/27/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 14 | Project Sign  | Fri 9/27/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 15 | Survey Activities   | Fri 9/27/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 16 | Quality Control Testing   | Fri 9/27/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 17 | Request for Quotations from Utility Companies for Relocation Works            | Fri 11/8/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 18 | Supply of Vehciles for Project Engineers                                      | Fri 9/27/19 |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 19 |   |             |          |          |          |          |          |          |          |          |          |          |          |          |          |

|   |          |  |                 |  |                    |  |
|---|----------|--|-----------------|--|--------------------|--|
| Project: Proposed Work Schedule.mp<br>Date: Tue 6/25/19 | Task     |  | Milestone       |  | External Tasks     |  |
|   | Split    |  | Summary         |  | External Milestone |  |
|   | Progress |  | Project Summary |  | Deadline           |  |

Belize Roadway Construction Ltd  
 Caracol Road Upgrade Lot 1A  
 PROPOSED WORK SCHEDULE

| ID | Task Name                                   | Start        | Qtr 2, 2                | Qtr 3, 2 | Qtr 4, 2 | Qtr 1, 2 | Qtr 2, 2 | Qtr 3, 2 | Qtr 4, 2 | Qtr 1, 2 | Qtr 2, 2 | Qtr 3, 2 | Qtr 4, 2 | Qtr 1, 2 | Qtr 2, 2 |
|----|---|--------------|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 20 | <b>Santa Elena - Junction - Georgeville</b> | Fri 10/11/19 | [Gantt bar for task 20] |          |          |          |          |          |          |          |          |          |          |          |          |
| 21 | Site Clearance /Fence Relocation            | Fri 10/11/19 | [Gantt bar for task 21] |          |          |          |          |          |          |          |          |          |          |          |          |
| 22 | Utillity Relocation                         | Tue 12/10/19 | [Gantt bar for task 22] |          |          |          |          |          |          |          |          |          |          |          |          |
| 23 | Excavation                                  | Fri 12/6/19  | [Gantt bar for task 23] |          |          |          |          |          |          |          |          |          |          |          |          |
| 24 | Scarification                               | Fri 1/3/20   | [Gantt bar for task 24] |          |          |          |          |          |          |          |          |          |          |          |          |
| 25 | Fill  | Fri 1/31/20  | [Gantt bar for task 25] |          |          |          |          |          |          |          |          |          |          |          |          |
| 26 | Sub-base                                    | Fri 2/28/20  | [Gantt bar for task 26] |          |          |          |          |          |          |          |          |          |          |          |          |
| 27 | Base  | Fri 3/27/20  | [Gantt bar for task 27] |          |          |          |          |          |          |          |          |          |          |          |          |
| 28 | Prime Coat & Double Surface Dressing        | Fri 4/24/20  | [Gantt bar for task 28] |          |          |          |          |          |          |          |          |          |          |          |          |
| 29 | Road Lighting                               | Fri 12/4/20  | [Gantt bar for task 29] |          |          |          |          |          |          |          |          |          |          |          |          |
| 30 | Bus Sheds and Pedestrian Crossings          | Fri 8/27/21  | [Gantt bar for task 30] |          |          |          |          |          |          |          |          |          |          |          |          |
| 31 | Guard Rails                                 | Fri 9/10/21  | [Gantt bar for task 31] |          |          |          |          |          |          |          |          |          |          |          |          |
| 32 | Road Signs                                  | Fri 10/8/21  | [Gantt bar for task 32] |          |          |          |          |          |          |          |          |          |          |          |          |
| 33 | Road Marking and Studs                      | Fri 10/22/21 | [Gantt bar for task 33] |          |          |          |          |          |          |          |          |          |          |          |          |
| 34 |   |              |                         |          |          |          |          |          |          |          |          |          |          |          |          |
| 35 | <b>Drainage Works</b>                       | Fri 12/6/19  | [Gantt bar for task 35] |          |          |          |          |          |          |          |          |          |          |          |          |
| 36 | Shaping Road Side Drains                    | Fri 1/3/20   | [Gantt bar for task 36] |          |          |          |          |          |          |          |          |          |          |          |          |
| 37 | Bridge Construction                         | Fri 1/31/20  | [Gantt bar for task 37] |          |          |          |          |          |          |          |          |          |          |          |          |
| 38 | Culvert Construction                        | Fri 12/6/19  | [Gantt bar for task 38] |          |          |          |          |          |          |          |          |          |          |          |          |
| 39 | <b>Demobilization</b>                       | Fri 3/11/22  | [Gantt bar for task 39] |          |          |          |          |          |          |          |          |          |          |          |          |

|   |          |             |                 |   |                    |             |
|---|----------|-------------|-----------------|---|--------------------|-------------|
| Project: Proposed Work Schedule.mp<br>Date: Tue 6/25/19 | Task     | [Gantt bar] | Milestone       | ◆ | External Tasks     | [Gantt bar] |
|   | Split    | [Gantt bar] | Summary         | ◆ | External Milestone | ◆           |
|   | Progress | [Gantt bar] | Project Summary | ◆ | Deadline           | ↓           |



## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                       |   |                        |
|-----------------------|---|------------------------|
| Type of Equipment:    |   |                        |
| <b>50 Ton Crane</b>   |   |                        |
| Equipment Information | Name of manufacturer  | Model and power rating |
|                       | <b>Hitachi Lattice Boom Track Crane</b>   | <b>(KH700-I)</b>       |
|                       | Capacity*   | Year of manufacture*   |
|                       | <b>150ton</b>   | <b>2005</b>            |
| Current Status        | Current location  |                        |
|                       | <b>Chetumal Mexico</b>  |                        |
|                       | Details of current commitments  |                        |
|                       | <b>Available</b>  |                        |
| Source                | Indicate source of the equipment<br><input type="checkbox"/> Owned <input checked="" type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                        |

Omit the following information for equipment owned by the Bidder.

|            |   |   |
|------------|---|---|
| Owner      | Name of owner: <b>Constroktor SA de CV</b>                                  |   |
|            | Address of owner: <b>452 Col Adolfo Lopez CP77010, Chetumal QRoo</b>        |   |
|            | Telephone<br><b>+52-983-129-1882</b><br><b>+52-983-120-5654</b>             | Telephone<br><b>+52-983-129-1882</b><br><b>+52-983-120-5654</b> |
|            | Fax-  | Fax-  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project: |   |
|            | To be rented to BRC for duration of project                                 |   |
|            |   |   |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|   |   |   |
|---|---|---|
| Type of Equipment: <b>Primary Crusher</b> |   |   |
| Equipment Information                     | Name of manufacturer<br><b>Pegson</b>   | Model and power rating<br><b>Premiertrak 1126</b> |
|   | Capacity<br><b>Jaw Crusher 26"x44"</b>  | Year of manufacture<br><b>2002</b>                |
| Current Status                            | Current location<br><b>Belmopan</b>   |   |
|   | Details of current commitments  |   |
| Source                                    | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |   |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|   |   |   |
|---|---|---|
| Type of Equipment: <b>Secondary Crusher</b> |   |   |
| Equipment Information                       | Name of manufacturer<br><b>Pegson</b>   | Model and power rating<br><b>Maxtrak 1000</b> |
|   | Capacity<br><b>Cone Crusher</b>   | Year of manufacture<br><b>2005</b>            |
| Current Status                              | Current location<br><b>Belmopan</b>   |   |
|   | Details of current commitments  |   |
| Source                                      | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |   |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |                                      |
|--------------------------------------|---|--------------------------------------|
| Type of Equipment: <b>Bulldozers</b> |   |                                      |
| Equipment Information                | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>D8R</b> |
|                                      | Capacity  | Year of manufacture<br><b>1998</b>   |
| Current Status                       | Current location<br><b>Belmopan</b>   |                                      |
|                                      | Details of current commitments  |                                      |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                      |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |                                      |
|--------------------------------------|---|--------------------------------------|
| Type of Equipment: <b>Bulldozers</b> |   |                                      |
| Equipment Information                | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>D8R</b> |
|                                      | Capacity  | Year of manufacture<br><b>1998</b>   |
| Current Status                       | Current location<br><b>Belmopan</b>   |                                      |
|                                      | Details of current commitments  |                                      |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                      |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                    |   |                                       |
|------------------------------------|---|---------------------------------------|
| Type of Equipment: <b>Loader 1</b> |   |                                       |
| Equipment Information              | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>950G</b> |
|                                    | Capacity  | Year of manufacture<br><b>2002</b>    |
| Current Status                     | Current location<br><b>Belmopan</b>   |                                       |
|                                    | Details of current commitments  |                                       |
| Source                             | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                       |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                    |   |                                       |
|------------------------------------|---|---------------------------------------|
| Type of Equipment: <b>Loader 2</b> |   |                                       |
| Equipment Information              | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>924K</b> |
|                                    | Capacity  | Year of manufacture<br><b>2014</b>    |
| Current Status                     | Current location<br><b>Belmopan</b>   |                                       |
|                                    | Details of current commitments  |                                       |
| Source                             | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                       |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |  |
|--------------------------------------|---|--|
| Type of Equipment: <b>Excavators</b> |   |  |
| Equipment Information                | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>345CL</b> |
|                                      | Capacity  | Year of manufacture<br><b>2006</b>     |
| Current Status                       | Current location<br><b>Belmopan</b>   |  |
|                                      | Details of current commitments  |  |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |



## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |  |
|--------------------------------------|---|--|
| Type of Equipment: <b>Excavators</b> |   |  |
| Equipment Information                | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>325DL</b> |
|                                      | Capacity  | Year of manufacture<br><b>2008</b>     |
| Current Status                       | Current location<br><b>Belmopan</b>   |  |
|                                      | Details of current commitments  |  |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |  |
|--------------------------------------|---|--|
| Type of Equipment: <b>Excavators</b> |   |  |
| Equipment Information                | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>325CL</b> |
|                                      | Capacity  | Year of manufacture<br><b>2005</b>     |
| Current Status                       | Current location<br><b>Belmopan</b>   |  |
|                                      | Details of current commitments  |  |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |  |
|--------------------------------------|---|--|
| Type of Equipment: <b>Excavators</b> |   |  |
| Equipment Information                | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>320CL</b> |
|                                      | Capacity<br><b>w/Jackhammer</b>   | Year of manufacture<br><b>2003</b>     |
| Current Status                       | Current location<br><b>Belmopan</b>   |  |
|                                      | Details of current commitments  |  |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                  |   |                                       |
|----------------------------------|---|---------------------------------------|
| Type of Equipment: <b>Grader</b> |   |                                       |
| Equipment Information            | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>140H</b> |
|                                  | Capacity<br><b>w/automated laser control</b>  | Year of manufacture<br><b>2001</b>    |
| Current Status                   | Current location<br><br><b>Belmopan</b>   |                                       |
|                                  | Details of current commitments  |                                       |
| Source                           | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                       |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner -  |                        |
|            | Address of owner -   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                  |   |                                      |
|----------------------------------|---|--------------------------------------|
| Type of Equipment: <b>Grader</b> |   |                                      |
| Equipment Information            | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>12G</b> |
|                                  | Capacity  | Year of manufacture<br><b>1996</b>   |
| Current Status                   | Current location<br><b>Belmopan</b>   |                                      |
|                                  | Details of current commitments  |                                      |
| Source                           | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                      |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|   |   |  |
|---|---|--|
| <b>Type of Equipment: Bitumen Distributor</b> |   |  |
| <b>Equipment Information</b>                  | Name of manufacturer<br><b>Chevrolet\ETNYRE BTHL 8000</b>   | Model and power rating<br><b>BTHL 8000</b> |
|   | Capacity  | Year of manufacture<br><b>2014</b>         |
| <b>Current Status</b>                         | Current location<br><b>Chetumal, Mexico</b>   |  |
|   | Details of current commitments<br><br><b>Available</b>  |  |
| <b>Source</b>                                 | Indicate source of the equipment<br><input type="checkbox"/> Owned <input checked="" type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|                   |   |   |
|-------------------|---|---|
| <b>Owner</b>      | Name of owner: <b>Constroktor SA de CV</b>  |   |
|                   | Address of owner: <b>452 Col Adolfo Lopez CP77010, Chetumal QRoo</b>  |   |
|                   | Telephone<br><b>+52-983-129-1882</b><br><b>+52-983-120-5654</b>   | Telephone<br><b>+52-983-129-1882</b><br><b>+52-983-120-5654</b> |
|                   | Fax-  | Fax-  |
| <b>Agreements</b> | Details of rental / lease / manufacture agreements specific to the project:<br><b>To be rented to BRC for duration of project</b> |   |
|                   |   |   |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                    |   |   |
|------------------------------------|---|---|
| Type of Equipment: <b>Roller 1</b> |   |   |
| Equipment Information              | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>C8634D Smooth Drum</b> |
|                                    | Capacity  | Year of manufacture<br><b>2002</b>                  |
| Current Status                     | Current location<br><b>Belmopan</b>   |   |
|                                    | Details of current commitments  |   |
| Source                             | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |   |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                    |   |   |
|------------------------------------|---|---|
| Type of Equipment: <b>Roller 2</b> |   |   |
| Equipment Information              | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>C5563D Vibratory Smooth Drum</b> |
|                                    | Capacity  | Year of manufacture<br><b>2003</b>                            |
| Current Status                     | Current location<br><b>Belmopan</b>   |   |
|                                    | Details of current commitments  |   |
| Source                             | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |   |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |



## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                   |   |                                       |
|-----------------------------------|---|---------------------------------------|
| Type of Equipment: <b>Backhoe</b> |   |                                       |
| Equipment Information             | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>420D</b> |
|                                   | Capacity<br><b>4x4</b>  | Year of manufacture<br><b>2003</b>    |
| Current Status                    | Current location<br><b>Belmopan</b>   |                                       |
|                                   | Details of current commitments  |                                       |
| Source                            | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                       |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                   |   |                                       |
|-----------------------------------|---|---------------------------------------|
| Type of Equipment: <b>Backhoe</b> |   |                                       |
| Equipment Information             | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>420D</b> |
|                                   | Capacity<br><b>4x4</b>  | Year of manufacture<br><b>2003</b>    |
| Current Status                    | Current location<br><b>Belmopan</b>   |                                       |
|                                   | Details of current commitments  |                                       |
| Source                            | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                       |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                   |   |                                       |
|-----------------------------------|---|---------------------------------------|
| Type of Equipment: <b>Backhoe</b> |   |                                       |
| Equipment Information             | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>420D</b> |
|                                   | Capacity<br><b>4x4</b>  | Year of manufacture<br><b>2008</b>    |
| Current Status                    | Current location<br><b>Belmopan</b>   |                                       |
|                                   | Details of current commitments  |                                       |
| Source                            | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                       |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                   |   |                                       |
|-----------------------------------|---|---------------------------------------|
| Type of Equipment: <b>Backhoe</b> |   |                                       |
| Equipment Information             | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>420E</b> |
|                                   | Capacity<br><b>4x4</b>  | Year of manufacture<br><b>2012</b>    |
| Current Status                    | Current location<br><b>Belmopan</b>   |                                       |
|                                   | Details of current commitments  |                                       |
| Source                            | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                       |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |  |
|--------------------------------------|---|--|
| Type of Equipment: <b>Dump Truck</b> |   |  |
| Equipment Information                | Name of manufacturer<br><b>Mack</b>   | Model and power rating<br><b>RD690</b> |
|                                      | Capacity<br><b>15yd3</b>  | Year of manufacture                    |
| Current Status                       | Current location<br><b>Belmopan</b>   |  |
|                                      | Details of current commitments  |  |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |  |
|--------------------------------------|---|--|
| <b>Type of Equipment: Dump Truck</b> |   |  |
| Equipment Information                | Name of manufacturer<br><b>Mack</b>   | Model and power rating<br><b>RD690</b> |
|                                      | Capacity<br><b>15yd3</b>  | Year of manufacture                    |
| Current Status                       | Current location<br><b>Belmopan</b>   |  |
|                                      | Details of current commitments  |  |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |                        |
|--------------------------------------|---|------------------------|
| Type of Equipment: <b>Dump Truck</b> |   |                        |
| Equipment Information                | Name of manufacturer<br><b>International</b>  | Model and power rating |
|                                      | Capacity<br><b>15yd3</b>  | Year of manufacture    |
| Current Status                       | Current location<br><b>Belmopan</b>   |                        |
|                                      | Details of current commitments  |                        |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                        |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |  |
|--------------------------------------|---|--|
| Type of Equipment: <b>Dump Truck</b> |   |  |
| Equipment Information                | Name of manufacturer<br><b>Kenworth</b>   | Model and power rating<br><b>T800B</b> |
|                                      | Capacity<br><b>15yd3</b>  | Year of manufacture                    |
| Current Status                       | Current location<br><b>Belmopan</b>   |  |
|                                      | Details of current commitments  |  |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |



## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |                                       |
|--------------------------------------|---|---------------------------------------|
| Type of Equipment: <b>Dump Truck</b> |   |                                       |
| Equipment Information                | Name of manufacturer<br><b>Kenworth</b>   | Model and power rating<br><b>T800</b> |
|                                      | Capacity<br><b>25yd3</b>  | Year of manufacture<br><b>1999</b>    |
| Current Status                       | Current location<br><b>Belmopan</b>   |                                       |
|                                      | Details of current commitments  |                                       |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                       |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |                                    |
|--------------------------------------|---|------------------------------------|
| Type of Equipment: <b>Dump Truck</b> |   |                                    |
| Equipment Information                | Name of manufacturer<br><b>Freight Liner</b>  | Model and power rating             |
|                                      | Capacity<br><b>15yd3</b>  | Year of manufacture<br><b>1999</b> |
| Current Status                       | Current location<br><b>Belmopan</b>   |                                    |
|                                      | Details of current commitments<br><b>Available</b>  |                                    |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                    |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |                                    |
|--------------------------------------|---|------------------------------------|
| Type of Equipment: <b>Dump Truck</b> |   |                                    |
| Equipment Information                | Name of manufacturer<br><b>Peter Built</b>  | Model and power rating             |
|                                      | Capacity<br><b>15yd3</b>  | Year of manufacture<br><b>1989</b> |
| Current Status                       | Current location<br><b>Belmopan</b>   |                                    |
|                                      | Details of current commitments<br><b>Available</b>  |                                    |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                    |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|                                      |   |                                    |
|--------------------------------------|---|------------------------------------|
| <b>Type of Equipment: Dump Truck</b> |   |                                    |
| Equipment Information                | Name of manufacturer  | Model and power rating             |
|                                      | <b>Freight Liner</b><br>Capacity<br><b>15yd3</b>  | Year of manufacture<br><b>1996</b> |
| Current Status                       | Current location  |                                    |
|                                      | <b>Belmopan</b><br>Details of current commitments<br><br><b>Available</b>   |                                    |
| Source                               | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                    |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|  |   |  |
|--|---|--|
| <b>Type of Equipment: Concrete Mixer Truck 1</b> |   |  |
| <b>Equipment Information</b>                     | Name of manufacturer<br><b>Reimer</b>   | Model and power rating<br><b>Volumetric Mixing Truck</b> |
|  | Capacity<br><b>14 CY</b>  | Year of manufacture<br><b>2006</b>                       |
| <b>Current Status</b>                            | Current location<br><b>Belmopan</b>   |  |
|  | Details of current commitments<br><b>Available</b>  |  |
| <b>Source</b>                                    | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|                   |   |                         |
|-------------------|---|-------------------------|
| <b>Owner</b>      | Name of owner:  |                         |
|                   | Address of owner:   |                         |
|                   | Telephone   | Contact name and title: |
|                   | Fax-  | Telex                   |
| <b>Agreements</b> | Details of rental / lease / manufacture agreements specific to the project: |                         |
|                   |   |                         |
|                   |   |                         |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|  |   |  |
|--|---|--|
| <b>Type of Equipment: Concrete Mixer Truck 2</b> |   |  |
| <b>Equipment Information</b>                     | Name of manufacturer<br><b>International/Braher</b>   | Model and power rating<br><b>Volumetric Mixing Truck</b> |
|  | Capacity<br><b>14 CY</b>  | Year of manufacture<br><b>2010</b>                       |
| <b>Current Status</b>                            | Current location<br><b>Chetumal, Mexico</b>   |  |
|  | Details of current commitments<br><b>Available</b>  |  |
| <b>Source</b>                                    | Indicate source of the equipment<br><input type="checkbox"/> Owned <input checked="" type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |  |

Omit the following information for equipment owned by the Bidder.

|                   |   |  |
|-------------------|---|--|
| <b>Owner</b>      | Name of owner: <b>Constroktor SA de CV</b>  |  |
|                   | Address of owner: <b>452 Col Adolfo Lopez CP77010, Chetumal QRoo</b>  |  |
|                   | Telephone<br><b>+52-983-129-1882</b><br><b>+52-983-120-5654</b>   | Contact name and title:<br><b>Enrique Canizares Gamboa</b><br>Director |
|                   | Fax-  | Telex  |
| <b>Agreements</b> | Details of rental / lease / manufacture agreements specific to the project:<br><b>To be rented to BRC for duration of project</b> |  |
|                   |   |  |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

| Type of Equipment: <b>Manual Concrete Mixer (1)</b> |   |                        |
|---|---|------------------------|
| Equipment Information                               | Name of manufacturer  | Model and power rating |
|   | Capacity  | Year of manufacture    |
| Current Status                                      | Current location  |                        |
|   | Details of current commitments  |                        |
| Source  | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                        |

Omit the following information for equipment owned by the Bidder.

|            |   |                         |
|------------|---|-------------------------|
| Owner      | Name of owner:  |                         |
|            | Address of owner:   |                         |
|            | Telephone   | Contact name and title: |
|            | Fax-  | Telex                   |
| Agreements | Details of rental / lease / manufacture agreements specific to the project: |                         |
|            |   |                         |
|            |   |                         |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|   |   |   |
|---|---|---|
| Type of Equipment: <b>Manual Concrete Mixer (2)</b> |   |   |
| Equipment Information                               | Name of manufacturer<br><b>Packer Brothers</b>  | Model and power rating<br><b>PB2600</b> |
|   | Capacity<br><b>9 CF</b>   | Year of manufacture<br><b>2013</b>      |
| Current Status                                      | Current location<br><b>Belmopan</b>   |   |
|   | Details of current commitments<br><b>Available</b>  |   |
| Source  | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |   |

Omit the following information for equipment owned by the Bidder.

|            |   |                         |
|------------|---|-------------------------|
| Owner      | Name of owner:  |                         |
|            | Address of owner:   |                         |
|            | Telephone   | Contact name and title: |
|            | Fax-  | Telex                   |
| Agreements | Details of rental / lease / manufacture agreements specific to the project: |                         |
|            |   |                         |
|            |   |                         |



## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|  |   |                                      |
|--|---|--------------------------------------|
| Type of Equipment: <b>Mechanical Sweeper</b> |   |                                      |
| Equipment Information                        | Name of manufacturer<br><b>Lay-Mor</b>  | Model and power rating<br><b>8HC</b> |
|  | Capacity<br><b>8'</b>   | Year of manufacture<br><b>2006</b>   |
| Current Status                               | Current location<br><b>Belmopan</b>   |                                      |
|  | Details of current commitments  |                                      |
| Source                                       | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                                      |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |

## Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

|   |   |   |
|---|---|---|
| Type of Equipment: <b>Pneumatic Tire Roller</b> |   |   |
| Equipment Information                           | Name of manufacturer<br><b>Caterpillar</b>  | Model and power rating<br><b>PS150C</b> |
|   | Capacity<br><b>Pneumatic Wheel</b>  | Year of manufacture<br><b>2005</b>      |
| Current Status                                  | Current location<br><b>Belmopan</b>   |   |
|   | Details of current commitments  |   |
| Source  | Indicate source of the equipment<br><input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |   |

Omit the following information for equipment owned by the Bidder.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |
|            |  |                        |
|            |  |                        |



26 June 2019

Chief Executive Officer  
Ministry of Works  
Power Lane,  
City of Belmopan  
Belize

Dear Mr. Gentle:

**Re: Belize Roadway Construction Ltd – Upgrading of Caracol Road Lots 1A and 1 B**

We write to confirm our company's agreement to rent the following equipment to Belize Roadway Construction Ltd. for the above project should they be successful in their bid for these works. The equipment shall be made available for the duration of the works as specified under the contract.

| Equipment           | Brand & Model                                     | Year of Manufacture |
|---------------------|---|---------------------|
| Crane               | 150ton Hitachi Lattice Boom Track Crane (KH700-I) | 2005                |
| Concrete Truck      | Truck: International, Mixer: Braher               | 2010                |
| Bitumen Distributor | Truck: Chevrolet\ETNYRE BTHL 8000                 | 2014                |

Please do not hesitate to contact us for any clarification needed on this matter.

Regards,

Ing. Enrique Cañizares Gamboa  
CONSTROKTOR SA de CV  
www.constroktor.com  
Director General  
Tel: +52(983)129 1882  
Cel: +521(983)1205654

Grupo  
**CONSTROKTOR**  
Proyectos & Edificaciones  
R.F.C. CON110425FW8

Mr. Timmy Banman  
Project Manager,  
Belize Roadway Construction Ltd.  
Entrepreneur Road  
Belmopan  
Belize

25 June 2019

**Letter of Acceptance – Project Manager**

Dear Sir,

I accept the position of Project Manager for Belize Roadway Construction Ltd. for the Upgrading of the Caracol Road Projects Lots 1A and 1B, should Belize Roadway Construction Ltd. be awarded the contract for these works.

Sincerely,



---

Mr. Jacob Banman  
501-610-4795

## PROFESSIONAL EXPERIENCE OF KEY STAFF CURRICULUM VITAE

Proposed position in the contract: Project Manager

1. Surname: Banman
2. Name: Jacob
3. Date and place of birth: July, 15 1971
4. Nationality: Belizean
5. Civil status: Married  
Address (phone/fax/e-mail): 822-2076 / N/A / office@belizeroadway.bz
6. Education: High School

|                                 |                            |
|---------------------------------|----------------------------|
| <i>Institutions:</i>            | <i>Private Institution</i> |
| <i>Date:</i>                    |                            |
| <i>From (month/year)</i>        | <i>September 1984</i>      |
| <i>To (month/year)</i>          | <i>June 1988</i>           |
| <i>Degree or qualification:</i> | <i>High School Diploma</i> |

7. Language skills

Indicate on a scale of 1 to 5 (1 — excellent; 5 — basic):

| <i>Language</i> | <i>Level</i>         | <i>Passive</i> | <i>Spoken</i> | <i>Written</i> |
|-----------------|----------------------|----------------|---------------|----------------|
| <i>English</i>  | <i>Mother tongue</i> | <i>1</i>       | <i>1</i>      | <i>1</i>       |
| <i>Spanish</i>  |                      | <i>3</i>       | <i>2</i>      | <i>3</i>       |
| <i>German</i>   |                      | <i>1</i>       | <i>1</i>      | <i>1</i>       |

8. Membership of professional bodies: -
9. Other skills (e.g. computer literacy): MS Office
10. Current position: Project Manager
11. Years of experience in position of Project Manager: 15years

12. Specific experience:

| <i>Country</i> | <i>Period</i>                          | <i>Project Name – Position and Employer</i>   |
|----------------|--|---|
| <i>Belize</i>  | <i>September 2017 – April 2019</i>     | <i>4<sup>th</sup> Road Project Lot 5 – Project Manager Belize Roadway Construction Ltd (BRC)</i>                    |
| <i>Belize</i>  | <i>Sept 2016 to Sept 2017</i>          | <i>Corozal Freezone Main Road Upgrading- Project Manager Belize Roadway Construction Ltd (BRC)</i>                  |
| <i>Belize</i>  | <i>January 2014 to December 2016</i>   | <i>Belize Road Safety Project Lot 4B - Project Manager Belize Roadway Construction Ltd (BRC)</i>                    |
| <i>Belize</i>  | <i>September 2015 to December 2016</i> | <i>Cristo Rey San Antonio Access Road Upgrade - Project Manager BRC</i>   |
| <i>Belize</i>  | <i>June 2013 to October 2016</i>       | <i>Hopkins Road Upgrade – Project Manager BRC</i>   |
| <i>Belize</i>  | <i>December 2014 to January 2016</i>   | <i>Perenco Upgrade of access roads and well site preparation - Project Manager BRC</i>                              |
| <i>Belize</i>  | <i>February 2015 to November 2015</i>  | <i>Frank's Eddy Road Upgrade - Project Manager BRC</i>  |
| <i>Belize</i>  | <i>May 2015 to October 2015</i>        | <i>Ministry of Works Street Upgrade in San Ignacio, Santa Elena, Rural Cayo, Rural Toledo - Project Manager BRC</i> |

|        |                            |   |
|--------|----------------------------|---|
| Belize | February 2014 to July 2014 | Upgrading of Queen Elizabeth Boulevard, Belmopan - Project Manager BRC  |
| Belize | April 2013 to May 2014     | US Capital Energy Santa Anna Road Upgrade and Temash access road construction and drill site preparation- Project Manager BRC |
| Belize | January 2014 to March 2014 | Paving of Judges Streets Belmopan - Project Manager BRC   |
| Belize | December 2013 to May 2014  | Upgrade of Mountain View Drainage Belmopan - Project Manager BRC  |
| Belize | February 2013 to May 2013  | Maranco Ltd Drill Site preparation and Road Access works - Project Manager BRC  |
| Belize | January 2013 to July 2013  | Paving of Belmopan Streets (Cayman, Barbados, St Vincent, Bermuda, Bahamas) - Project Manager BRC                             |
| Belize | June 2012 to Oct 2012      | Bus 1 way / Bus Parking East Street – Rehabilitate street around bus terminal– Project Manager BRC                            |
| Belize | Mar 2012 to July 2012      | Western Border Parking Lot – Rehab. of Parking area– Project Manager BRC  |
| Belize | July 2011 to April 2012    | Marina Project – Quarry Operations– Project Manager BRC   |
| Belize | Feb 2011 to July 2011      | Cayo Streets Upgrade Project – Rehabilitation of Streets– Project Manager BRC   |
| Belize | July 2009 to Feb 2011      | IRF Road Rehabilitation Project – Bullet Tree Road Upgrade Project– Project Manager BRC                                       |
| Belize | May 2009 to June 2010      | North Plancencia International Airport – Construction of Runway & Apron– Project Manager BRC                                  |
| Belize | 2006 to Nov 2009           | Roads & Drill Site Platforms – Construction of 29 miles of Road & Drill Site Platform– Project Manager BRC                    |
| Belize | Feb 2006 to Aug 2006       | Belmopan City – Upgrade 4.5 miles of street for new Subdivision– Project Manager BRC  |
| Belize | 2004 to 2006               | Lomas de Las Flores Road & Drainage Project & Belmopan City Council Subdivision Projects– Project Manager BRC                 |
| Belize | 1992 to 2002               | Supervision of various road construction projects - Supervisor at Banman & Penner Cat   |

Mr. Timmy Banman  
Project Manager,  
Belize Roadway Construction Ltd.  
Entrepreneur Road  
Belmopan  
Belize

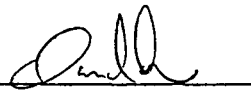
26 June 2019

**Letter of Acceptance – Engineer/Construction Manager**

Dear Sir,

I accept the position of Engineer/Construction Manager for Belize Roadway Construction Ltd. For the Caracol Road Upgrading Project Lots 1A and 1B, should they be awarded the contract for these works.

Sincerely,



Mr. Daniel Cano  
Civil Engineer  
501-607-4779

## PROFESSIONAL EXPERIENCE OF KEY STAFF CURRICULUM VITAE

Proposed position in the contract: Engineer/ Construction Manager

1. Surname: Cano
2. Name: Daniel
3. Date and place of birth: October 28, 1973
4. Nationality: Belizean
5. Civil status: Married  
Address (phone/fax/e-mail): 822-2076 / N/A / office@belizeroadway.bz
6. Education: BSC Engineering

|                                 |                                      |
|---------------------------------|--------------------------------------|
| <i>Institutions:</i>            | <i>University of the West Indies</i> |
| <i>Date:</i>                    |                                      |
| <i>From (month/year)</i>        | <i>September 1993</i>                |
| <i>To (month/year)</i>          | <i>May 1996</i>                      |
| <i>Degree or qualification:</i> | <i>BSC Engineering</i>               |

7. Language skills  
Indicate on a scale of 1 to 5 (1 — excellent; 5 — basic):

| <i>Language</i> | <i>Level</i>         | <i>Passive</i> | <i>Spoken</i> | <i>Written</i> |
|-----------------|----------------------|----------------|---------------|----------------|
| <i>English</i>  | <i>Mother tongue</i> | <i>1</i>       | <i>1</i>      | <i>1</i>       |
| <i>Spanish</i>  |                      | <i>2</i>       | <i>1</i>      | <i>2</i>       |

8. Membership of professional bodies: Association of Professional Engineers of Belize
9. Other skills (e.g. computer literacy): Proficient with AutoCAD, MS Project, MS Office
10. Current position: Engineer
11. Years of professional experience: 23 years
12. Key qualifications: BSC Engineer

13. Specific experience:

|               |  |   |
|---------------|--|---|
| <i>Belize</i> | <i>Sept 2017 to Apr 2019</i>               | <i>4<sup>th</sup> Road Project Lot 5 – Engineer/ Construction Manager<br/>Belize Roadway Construction Ltd (BRC)</i>   |
| <i>Belize</i> | <i>Sept 2016 to Sept 2017</i>              | <i>Corozal Freezone Main Road Upgrading- Engineer/<br/>Construction Manager Belize Roadway Construction Ltd (BRC)</i> |
| <i>Belize</i> | <i>Jan 2014 to Dec 2016</i>                | <i>Belize Road Safety Project Lot4B – Engineer/ Construction<br/>Manager Belize Roadway Construction Ltd (BRC)</i>    |
| <i>Belize</i> | <i>September 2015 to<br/>December 2016</i> | <i>Cristo Rey San Antonio Access Road Upgrade - Engineer BRC</i>  |
| <i>Belize</i> | <i>Feb 2015 to Nov 2015</i>                | <i>Frank's Eddy Road Upgrade - Engineer Construction Manager<br/>BRC</i>  |
| <i>Belize</i> | <i>Feb 2014 to July 2014</i>               | <i>Upgrading of Queen Elizabeth Boulevard, Belmopan -<br/>Engineer Construction Manager BRC</i>                       |
| <i>Belize</i> | <i>Nov 2013 to Oct2016</i>                 | <i>Hopkins Road Upgrade – Engineer/ Construction Manager</i>  |
| <i>Belize</i> | <i>Feb 2014 to Present</i>                 | <i>Queen Elizabeth Boulevard - Engineer Construction Manager</i>  |
| <i>Belize</i> | <i>June 2010 to Sept 2013</i>              | <i>Belize Municipal Development Project and SIFII Project –<br/>Project preparation and execution activities</i>      |



|        |                      |   |
|--------|----------------------|---|
| Belize | Dec 2000 to Nov 2009 | SIF - Manager of Unit to identify, appraise, supervise execution of sub-projects under:<br>Caribbean Development Bank BNTF Project<br>Commonwealth Debt Initiative Project<br>Caribbean Development Bank Social Investment II Project<br>European Union Special Development Programme |
|--------|----------------------|---|

14. Professional experience:

|   |   |
|---|---|
| Date: from (month/year) to (month/year) | November 2013 to Present                  |
| Place                                   | Belmopan                                  |
| Company/organisation                    | Belize Roadway Construction Ltd.          |
| Position                                | Engineer                                  |
| Job description                         | Contract management, designs & estimating |

|   |  |
|---|--|
| Date: from (month/year) to (month/year) | April 1999 – September 2013  |
| Place                                   | Belmopan   |
| Company/organisation                    | Social Investment Fund   |
| Positions                               | Director, Technical Unit Coordinator, Engineer   |
| Job description                         | Project Preparation and Execution Activities.<br>Identify, appraise, supervise execution of projects.<br>Design, Estimates and supervision |

|   |                                   |
|---|-----------------------------------|
| Date: from (month/year) to (month/year) | June 1996 to April 1999           |
| Place                                   | Belize City                       |
| Company/organisation                    | Professional Engineering Services |
| Position                                | Engineer                          |
| Job description                         | Design, Estimates and supervision |

15. Others:-

15a. Publications and seminars:-

15b. References:

- Mrs Yvonne Hyde, Chief Executive Officer, Ministry of Finance and Economic Development
- Mr. Wilfredo Guerrero, President, Association of Professional Engineers of Belize

Mr. Timmy Banman  
Project Manager,  
Belize Roadway Construction Ltd.  
Entrepreneur Road  
Belmopan  
Belize

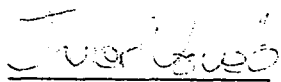
26 June 2019

**Letter of Acceptance – Quality Control Manager/ Laboratory Supervisor**

Dear Sir,

I accept the position of Quality Control Manager/ Laboratory Supervisor for Belize Roadway Construction Ltd. For the Caracol Road Upgrading Project Lots 1A and 1B, should they be awarded the contract for these works.

Sincerely,



Mr. Javier Novelo  
Laboratory Technician  
501-664-0293

## PROFESSIONAL EXPERIENCE OF KEY STAFF CURRICULUM VITAE

Proposed position in the contract: Quality Control Manager / Laboratory Supervisor

1. Surname: Novelo
2. Name: Javier
3. Date and place of birth: April 7, 1969, Belize City
4. Nationality: Belizean
5. Civil status: Married  
Address(phone/fax/e-mail): 664-0293 / N/A / javiernovelo.brc@gmail.com
6. Education: Associate Degree in Building and Civil Engineering.

|  |                                 |
|--|---------------------------------|
| <i>Institutions:</i>                             |                                 |
| <i>Date: 1987 - 1989</i>                         | <i>Belize Technical College</i> |
| <i>Degree or qualification: Associate Degree</i> |                                 |

7. Language skills

Indicate on a scale of 1 to 5 (1 — excellent; 5 — basic):

| <i>Language</i> | <i>Level</i> | <i>Passive</i> | <i>Spoken</i> | <i>Written</i> |
|-----------------|--------------|----------------|---------------|----------------|
| <i>English</i>  | 2            | 1              | 1             | 2              |
| <i>Spanish</i>  | 5            | 5              | 5             | 5              |

8. Membership of professional bodies:-
9. Other skills (e.g. computer literacy): Autocad & Microsoft Excel
10. Current position: Quality Assurance Manager
11. Years of professional experience: 26 years
12. Key qualifications: Associates Degree
13. Specific experience:

|               |   |  |
|---------------|---|--|
| <i>Belize</i> | <i>Date: May 2015 to Present</i><br><br><i>Belize Roadway Construction.</i><br><i>Quality Assurance Manager</i> | <i>Belize Road Safety Project Lot 4B, 4<sup>th</sup> Road Project Lot 5, Corozal Freezone Project – Ensure quality of materials produced by BRC quarry operations that are in line with ASTM, BS Standards or others as necessary.</i><br><i>Conduct material tests and prepare test reports.</i><br><i>Conduct material tests and prepare test reports.</i><br><i>Provide onsite and office support in the resolution of material quality issues.</i> |
| <i>Belize</i> | <i>June. 2005 to June 2014</i><br><i>Belmopan City Council</i><br><i>Engineering Assistant</i>                  | <i>Supervise all civil works carried out by the Council.</i>   |
| <i>Belize</i> | <i>June 2014 to March 2015</i><br><i>Belmopan City Council</i><br><i>Engineering Manager</i>                    | <i>Manage and supervised all engineering functions involved in the City's public works, parks and buildings.</i>   |

|        |  |   |
|--------|--|---|
| Belize | 2004 - 2005<br>Rodla Construction.<br>Construction Supervisor  | Underground ducts for BTL fiber optic cables in the Stann Creek District.<br>Construction of parking lot at the Phillip Godson Airport.   |
| Belize | 2003 - 2004<br>WSP/Professional Engineering Ltd.<br>Senior Site Inspector - Upgrading of the Caracol Road(Cayo District) | Overseeing the construction of all pipes and box culvert, road embankment and pavement layer to ensure that all works are in accordance with technical drawings and specifications.   |
| Belize | 2002 - 2003<br>DIWI Consult internationalGmbh.<br>Senior Site Inspector - Upgrading of the Southern Hwy. section 2       | Overseeing the construction of all pipes and box culvert, road embankment and pavement layer to ensure works are in accordance with technical drawings and specifications.<br>Assist Resident Engineer in checking quantity of works(Payment Certificates) for payment to contractor. |
| Belize | 1999 - 2001<br>WSP/Professional Engineering Ltd.<br>Quality Control Engineer - Upgrading of Southern Hwy. Section 3      | Overseeing the construction of all pipes and box culvert, road embankment and pavement layer to ensure that all works are in accordance with technical drawings and specifications.<br>Check and ensure that site quality control procedures are complied with.                       |
| Belize | 1992 - 1999<br>Professional Engineering Ltd.<br>Material Testing Technician.   | Collect test and analysed the physical properties of soil.  |
| Belize | 1989 - 1992<br>Merton Construction.<br>Construction Supervisor   | Sub-structure for Big Falls Bridge Toledo District.<br>Sub-structure for San Estevan Bridge Orange District<br>Retaining Wall for Belize Mills. Belize Cit.   |

14. Professional experience:

|   |  |
|---|--|
| Date: from (month/year) to (month/year) | 2001 to Present  |
| Place                                   | Various  |
| Companies                               | Merton, PES, DIWI, Rodla, Belmopan City Council, BRC   |
| Positions                               | Construction Supervisor, Materials Testing Technician, Site Inspector, Engineering Manager, Quality Assurance Manager  |
| Job description                         | Monitoring of road Construction horizontal alignment and levels.<br>Construction of 32.8Km or roads.<br>Construction of 12 lots with utilities, 1.5Km of Paved Road and Drainages and 2 outfall culverts.<br>Construction of 33.4Km of Road.<br>Supervision of a new road construction.<br>Construction of 7 buildings, 6 out buildings and the main Office building for the U.S Embassy land. |

15. Others:-

15a. Publications and seminars:-

15b. References:

Douglas Walker, Principal, Professional Engineering Services  
James Robinson, Project Engineer, Belize Road Safety Project

**CONDITIONS OF CONTRACT**

# General Conditions (GC)

1. **General Provisions**
  - 1.1 Definitions
  - 1.2 Interpretation
  - 1.3 Communications
  - 1.4 Law and Language
  - 1.5 Priority of Documents
  - 1.6 Contract Agreement
  - 1.7 Assignment
  - 1.8 Care and Supply of Documents
  - 1.9 Delayed Drawings or Instructions
  - 1.10 Employer's Use of Contractor's Documents
  - 1.11 Contractor's Use of Employer's Documents
  - 1.12 Confidential Details
  - 1.13 Compliance with Laws
  - 1.14 Joint and Several Liability
  - 1.15 Inspections and Audit by the Bank
  
2. **The Employer**
  - 2.1 Right of Access to the Site
  - 2.2 Permits, Licences or Approvals
  - 2.3 Employer's Personnel
  - 2.4 Employer's Financial Arrangements
  - 2.5 Employer's Claims
  
3. **The Engineer**
  - 3.1 Engineer's Duties and Authority
  - 3.2 Delegation by the Engineer
  - 3.3 Instructions of the Engineer
  - 3.4 Replacement of the Engineer
  - 3.5 Determinations
  
4. **The Contractor**
  - 4.1 Contractor's General Obligations
  - 4.2 Performance Security
  - 4.3 Contractor's Representative
  - 4.4 Subcontractors
  - 4.5 Assignment of Benefit of Subcontract
  - 4.6 Co-operation
  - 4.7 Setting Out
  - 4.8 Safety Procedures
  - 4.9 Quality Assurance

- 4.10 Site Data
  - 4.11 Sufficiency of the Accepted Contract Amount
  - 4.12 Unforeseeable Physical Conditions
  - 4.13 Rights of Way and Facilities
  - 4.14 Avoidance of Interference
  - 4.15 Access Route
  - 4.16 Transport of Goods
  - 4.18 Protection of the Environment
  - 4.19 Electricity, Water and Gas
  - 4.22 Security of the Site
  - 4.23 Contractor's Operations on Site
  - 4.24 Fossils
- 5 Nominated Subcontractors**
- 5.1 Definition of "nominated Subcontractor"
  - 5.2 Objection to Nomination
  - 5.3 Payments to nominated Subcontractors
  - 5.4 Evidence of Payments
- 6. Staff and Labour**
- 6.1 Engagement of Staff and Labour
  - 6.2 Rates of Wages and Conditions of Labour
  - 6.3 Persons in the Service of Employer
  - 6.4 Labour Laws
  - 6.5 Working Hours
  - 6.6 Facilities for Staff and Labour
  - 6.7 Health and Safety
  - 6.8 Contractor's Superintendence
  - 6.9 Contractor's Personnel
  - 6.10 Records of Contractor's Personnel and Equipment
  - 6.11 Disorderly Conduct
  - 6.12 Foreign Personnel
  - 6.13 Supply of Foodstuffs
  - 6.14 Supply of Water
  - 6.15 Measures against Insect and Pest Nuisance
  - 6.16 Alcoholic Liquor or Drugs
  - 6.17 Arms and Ammunition
  - 6.18 Festivals and Religious Customs
  - 6.19 Funeral Arrangements
  - 6.20 Prohibition of Forced or Compulsory Labour
  - 6.21 Prohibition of Harmful Child Labour
  - 6.22 Employment Records of Workers
- 7. Plant, Materials and Workmanship**
- 7.1 Manner of Execution
  - 7.2 Samples
  - 7.3 Inspection
  - 7.4 Testing

- 7.5 Rejection
- 7.6 Remedial Work
- 7.7 Ownership of Plant and Materials
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## General Conditions

### 1. General Provisions

#### 1.1 Definitions

In the Conditions of Contract ("these Conditions"), which include Particular Conditions, Parts A and B, and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

##### 1.1.1 The Contract

- 1.1.1.1 "Contract" means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, these Conditions, the Specification, the Drawings, the Schedules, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.
- 1.1.1.2 "Contract Agreement" means the contract agreement referred to in Sub-Clause 1.6 [Contract Agreement].
- 1.1.1.3 "Letter of Acceptance" means the letter of formal acceptance, signed by the Employer, of the Letter of Tender, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression "Letter of Acceptance" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.
- 1.1.1.4 "Letter of Tender" means the document entitled letter of tender or letter of bid, which was completed by the Contractor and includes the signed offer to the Employer for the Works.
- 1.1.1.5 "Specification" means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.
- 1.1.1.6 "Drawings" means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract.
- 1.1.1.7 "Schedules" means the document(s) entitled

schedules, completed by the Contractor and submitted with the Letter of Tender, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.

1.1.1.8 "Tender" means the Letter of Tender and all other documents which the Contractor submitted with the Letter of Tender, as included in the Contract.

1.1.1.9 "Bill of Quantities", "Daywork Schedule" and "Schedule of Payment Currencies" mean the documents so named (if any) which are comprised in the Schedules.

1.1.1.10 "Contract Data" means the pages completed by the Employer entitled contract data which constitute Part A of the Particular Conditions.

## 1.1.2 Parties and Persons

1.1.2.1 "Party" means the Employer or the Contractor, as the context requires.

1.1.2.2 "Employer" means the person named as employer in the Contract Data and the legal successors in title to this person.

1.1.2.3 "Contractor" means the person(s) named as contractor in the Letter of Tender accepted by the Employer and the legal successors in title to this person(s).

1.1.2.4 "Engineer" means the person appointed by the Employer to act as the Engineer for the purposes of the Contract and named in the Contract Data, or other person appointed from time to time by the Employer and notified to the Contractor under Sub-Clause 3.4 [Replacement of the Engineer].

1.1.2.5 "Contractor's Representative" means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [Contractor's Representative], who acts on behalf of the Contractor.

1.1.2.6 "Employer's Personnel" means the Engineer, the assistants referred to in Sub-Clause 3.2 [Delegation by the Engineer] and all other staff, labour and other employees of the Engineer and of

the Employer; and any other personnel notified to the Contractor, by the Employer or the Engineer, as Employer's Personnel.

- 1.1.2.7 "Contractor's Personnel" means the Contractor's Representative and all personnel whom the Contractor utilises on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.
- 1.1.2.8 "Subcontractor" means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.
- 1.1.2.9 "DB" means the person or three persons appointed under Sub-Clause 20.2 [Appointment of the Dispute Board] or Sub-Clause 20.3 [Failure to Agree on the Composition of the Dispute Board]
- 1.1.2.10 "FIDIC" means the Fédération Internationale des Ingénieurs-Conseils, the international federation of consulting engineers.
- 1.1.2.11 "Bank" means the financing institution (if any) named in the Contract Data.
- 1.1.2.12 "Recipient of OFID Financing" means the person (if any) named as the Recipient of OFID Financing in the Contract Data.
- 1.1.3 **Dates, Tests, Periods and Completion**
  - 1.1.3.1 "Base Date" means the date 28 days prior to the latest date for submission of the Tender.
  - 1.1.3.2 "Commencement Date" means the date notified under Sub-Clause 8.1 [Commencement of Works].
  - 1.1.3.3 "Time for Completion" means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [Time for Completion], as stated in the Contract Data (with any extension under Sub-Clause 8.4 [Extension of Time for Completion]), calculated from the Commencement Date.

- 1.1.3.4 "Tests on Completion" means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.5 "Taking-Over Certificate" means a certificate issued under Clause 10 [Employer's Taking Over].
- 1.1.3.6 "Tests after Completion" means the tests (if any) which are specified in the Contract and which are carried out in accordance with the Specification after the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.7 "Defects Notification Period" means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], which extends over twelve months except if otherwise stated in the Contract Data (with any extension under Sub-Clause 11.3 [Extension of Defects Notification Period]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [Taking Over of the Works and Sections].
- 1.1.3.8 "Performance Certificate" means the certificate issued under Sub-Clause 11.9 [Performance Certificate].
- 1.1.3.9 "day" means a calendar day and "year" means 365 days.

**1.1.4 Money and Payments**

- 1.1.4.1 "Accepted Contract Amount" means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- 1.1.4.2 "Contract Price" means the price defined in Sub-Clause 14.1 [The Contract Price], and includes adjustments in accordance with the Contract.
- 1.1.4.3 "Cost" means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.
- 1.1.4.4 "Final Payment Certificate" means the payment

certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].

1.1.4.5 "Final Statement" means the statement defined in Sub-Clause 14.11 [Application for Final Payment Certificate].

1.1.4.6 "Foreign Currency" means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.

1.1.4.7 "Interim Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.

1.1.4.8 "Local Currency" means the currency of the Country.

1.1.4.9 "Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment].

1.1.4.10 "Provisional Sum" means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums].

1.1.4.11 "Retention Money" means the accumulated retention moneys which the Employer retains under Sub-Clause 14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.9 [Payment of Retention Money].

1.1.4.12 "Statement" means a statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

## 1.1.5 Works and Goods

1.1.5.1 "Contractor's Equipment" means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Employer's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.

- 1.1.5.2 "Goods" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
  - 1.1.5.3 "Materials" means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.
  - 1.1.5.4 "Permanent Works" means the permanent works to be executed by the Contractor under the Contract.
  - 1.1.5.5 "Plant" means the apparatus, machinery and other equipment intended to form or forming part of the Permanent Works, including vehicles purchased for the Employer and relating to the construction or operation of the Works.
  - 1.1.5.6 "Section" means a part of the Works specified in the Contract Data as a Section (if any).
  - 1.1.5.7 "Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.
  - 1.1.5.8 "Works" mean the Permanent Works and the Temporary Works, or either of them as appropriate.
- 1.1.6 Other Definitions**
- 1.1.6.1 "Contractor's Documents" means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.
  - 1.1.6.2 "Country" means the country in which the Site (or most of it) is located, where the Permanent Works are to be executed.
  - 1.1.6.3 "Employer's Equipment" means the apparatus, machinery and vehicles (if any) made available by the Employer for the use of the Contractor in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Employer.



- 1.1.6.4 "Force Majeure" is defined in Clause 19 [Force Majeure].
- 1.1.6.5 "Laws" means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.
- 1.1.6.6 "Performance Security" means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security].
- 1.1.6.7 "Site" means the places where the Permanent Works are to be executed including storage and working areas and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.
- 1.1.6.8 "Unforeseeable" means not reasonably foreseeable by an experienced contractor by the Base Date.
- 1.1.6.9 "Variation" means any change to the Works, which is instructed or approved as a variation under Clause 13 [Variations and Adjustments].

## 1.2 Interpretation

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word "agree," "agreed" or "agreement" require the agreement to be record in writing;
- (d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and
- (e) the word "tender" is synonymous with "bid", and "tenderer" with "bidder" and the words "tender documents" with "bidding documents"

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

In these Conditions, provisions including the expression "Cost plus profit" require this profit to be one-twentieth (5%) of this Cost unless otherwise indicated in the Contract Data.

### 1.3 Communications

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Contract Data; and
- (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract Data. However:
  - (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
  - (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Engineer or the other Party, as the case may be.

### 1.4 Law and Language

The Contract shall be governed by the law of the country or other jurisdiction stated in the Contract Data.

The ruling language of the Contract shall be that stated in the Contract Data.

The language for communications shall be that stated in the Contract Data. If no language is stated there, the language for communications shall be the ruling language of the Contract.

**1.5 Priority of Documents**

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) the Contract Agreement (if any),
- (b) the Letter of Acceptance,
- (c) the Tender,
- (d) the Particular Conditions – Part A,
- (e) the Particular Conditions – Part B
- (f) these General Conditions
- (g) the Specification,
- (h) the Drawings, and
- (i) the Schedules and any other documents forming part of the Contract.

If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

**1.6 Contract Agreement**

The Parties shall enter into a Contract Agreement within 28 days after the Contractor receives the Letter of Acceptance, unless the Particular Conditions establish otherwise. The Contract Agreement shall be based upon the form annexed to the Particular Conditions. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer.

**1.7 Assignment**

Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:

- (a) may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and
- (b) may, as security in favour of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract.

**1.8 Care and Supply of Documents**

The Specification and Drawings shall be in the custody and care of the Employer. Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.

Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the

Contractor shall supply to the Engineer six copies of each of the Contractor's Documents.

The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.

If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

**1.9 Delayed Drawings or Instructions**

The Contractor shall give notice to the Engineer whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and the nature and amount of the delay or disruption likely to be suffered if it is late.

If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

However, if and to the extent that the Engineer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit

**1.10 Employer's Use of Contractor's Documents**

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This licence shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.

**1.11 Contractor's Use  
of Employer's  
Documents**

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

**1.12 Confidential  
Details**

The Contractor's and the Employer's Personnel shall disclose all such confidential and other information as may be reasonably required in order to verify the Contractor's compliance with the Contract and allow its proper implementation.

Each of them shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.

**1.13 Compliance with  
Laws**

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Particular Conditions:

- (a) the Employer shall have obtained (or shall obtain) the planning, zoning, building permit or similar permission for the Permanent Works, and any other permissions described in the Specification as having been (or to be) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
- (b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so,

unless the Contractor is impeded to accomplish these actions and shows evidence of its diligence.

**1.14 Joint and Several Liability**

If the Contractor constitutes (under applicable Laws) a joint venture or other unincorporated grouping of two or more persons:

- (a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract;
- (b) these persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and
- (c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer.

**1.15 Inspections and Audit by the Bank**

The Contractor shall permit the Bank and/or persons appointed by the Bank to inspect the Site and/or the accounts and records of the Contractor and its subcontractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank. The Contractor's attention is drawn to Sub-Clause 15.6 [Corrupt or Fraudulent Practices] which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 1.15 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under the Procurement Guidelines).

**2. The Employer**

**2.1 Right of Access to the Site**

The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the Contract Data. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Specification. However, the Employer may withhold any such right or possession until the Performance Security has been received.

If no such time is stated in the Contract Data, the Employer shall give the Contractor right of access to, and possession

of, the Site within such times as required to enable the Contractor to proceed without disruption in accordance with the programme submitted under Sub-Clause 8.3 [Programme].

If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

## 2.2 Permits, Licences or Approvals

The Employer shall provide, at the request of the Contractor, such reasonable assistance as to allow the Contractor to obtain properly:

- (a) copies of the Laws of the Country which are relevant to the Contract but are not readily available, and
- (b) any permits, licences or approvals required by the Laws of the Country:
  - (i) which the Contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws],
  - (ii) for the delivery of Goods, including clearance through customs, and
  - (iii) for the export of Contractor's Equipment when it is removed from the Site.



**2.3 Employer's  
Personnel**

The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other contractors on the Site:

- (a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [Co-operation], and
- (b) take actions similar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment].

**2.4 Employer's  
Financial  
Arrangements**

The Employer shall submit, before the Commencement Date and thereafter within 28 days after receiving any request from the Contractor, reasonable evidence that financial arrangements have been made and are being maintained which will enable the Employer to pay the Contract Price punctually (as estimated at that time) in accordance with Clause 14 [Contract Price and Payment]. Before the Employer makes any material change to his financial arrangements, the Employer shall give notice to the Contractor with detailed particulars.

In addition, if the Bank has notified to the Recipient of OFID Financing that the Bank has suspended disbursements under its loan, which finances in whole or in part the execution of the Works, the Employer shall give notice of such suspension to the Contractor with detailed particulars, including the date of such notification, with a copy to the Engineer, within 7 days of the Recipient of OFID Financing having received the suspension notification from the Bank. If alternative funds will be available in appropriate currencies to the Employer to continue making payments to the Contractor beyond a date 60 days after the date of Bank notification of the suspension, the Employer shall provide reasonable evidence in such notice of the extent to which such funds will be available.

**2.5 Employer's  
Claims**

If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Employer or the Engineer shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 [Electricity, Water and Gas], under Sub-Clause 4.20 [Employer's Equipment and Free-Issue Material], or for other services requested by the Contractor.

The notice shall be given as soon as practicable and no longer than 28 days after the Employer became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. The Engineer shall then proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the amount (if any) which the Employer is entitled to be paid by the Contractor, and/or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub-Clause 11.3 [Extension of Defects Notification Period].

This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

### **3. The Engineer**

#### **3.1 Engineer's Duties and Authority**

The Employer shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.

The Engineer shall have no authority to amend the Contract.

The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. If the Engineer is required to obtain the approval of the Employer before exercising a specified authority, the requirements shall be as stated in the Particular Conditions. The Employer shall promptly inform the Contractor of any change to the authority attributed to the Engineer.

However, whenever the Engineer exercises a specified authority for which the Employer's approval is required, then (for the purposes of the Contract) the Employer shall be deemed to have given approval.

Except as otherwise stated in these Conditions:

- (a) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer;
- (b) the Engineer has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract; and
- (c) any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances.
- (d) Any act by the Engineer in response to a Contractor's request except otherwise expressly specified shall be notified in writing to the Contractor within 28 days of receipt.

The following provisions shall apply:

The Engineer shall obtain the specific approval of the Employer before taking action under the-following Sub-Clauses of these Conditions:

- (a) Sub-Clause 4.12 [Unforeseeable Physical Conditions]: Agreeing or determining an extension of time and/or additional cost.
- (b) Sub-Clause 13.1 [Right to Vary]: Instructing a Variation, except;
  - (i) in an emergency situation as determined by the Engineer, or
  - (ii) if such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the Contract Data.
- (c) Sub-Clause 13.3 [Variation Procedure]: Approving a proposal for Variation submitted by the Contractor in accordance with Sub Clause 13.1 [Right to Vary] or 13.2 [Value Engineering].

- (d) Sub-Clause 13.4 [Payment in Applicable Currencies]:  
Specifying the amount payable in each of the applicable currencies

Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 [Variations and Adjustments] and shall notify the Contractor accordingly, with a copy to the Employer.

**3.2 Delegation by the Engineer**

The Engineer may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident engineer, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties.

However, unless otherwise agreed by both Parties, the Engineer shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations].

Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language].

Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorised to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer. However:

- (a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Engineer to reject the work, Plant or Materials;
- (b) if the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Engineer, who shall promptly confirm, reverse or vary the determination or instruction.

**3.3 Instructions of the Engineer**

The Engineer may issue to the Contractor (at any time) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

The Contractor shall comply with the instructions given by the Engineer or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Engineer or a delegated assistant:

- (a) gives an oral instruction,
- (b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and
- (c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation,

then the confirmation shall constitute the written instruction of the Engineer or delegated assistant (as the case may be).

**3.4 Replacements of the Engineer**

If the Employer intends to replace the Engineer, the Employer shall, not less than 21 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended replacement Engineer. If the Contractor considers the intended replacement Engineer to be unsuitable, he has the right to raise objection against him by notice to the Employer, with supporting particulars, and the Employer shall give full and fair consideration to this objection.

**3.5 Determinations**

Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Engineer shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars within 28 days from the receipt of the corresponding claim or request except when otherwise specified. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

**4. The Contractor**

**4.1 Contractor's  
General  
Obligations**

The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Engineer's instructions, and shall remedy any defects in the Works.

The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.

All equipment, material, and services to be incorporated in or required for the Works shall have their origin in any eligible source country as defined by the Bank.

The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor (i) shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and (ii) shall not otherwise be responsible for the design or specification of the Permanent Works.

The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods

shall be made without this having previously been notified to the Engineer.

If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall submit to the Engineer the Contractor's Documents for this part in accordance with the procedures specified in the Contract;
- (b) these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Engineer to add to the Drawings for co-ordination of each Party's designs;
- (c) the Contractor shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and
- (d) prior to the commencement of the Tests on Completion, the Contractor shall submit to the Engineer the "as-built" documents and, if applicable, operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Engineer.

#### 4.2 Performance Security

The Contractor shall obtain (at his cost) a Performance Security for proper performance, in the amount and currencies stated in the Contract Data. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.

The Contractor shall deliver the Performance Security to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Engineer. The Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer.

The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.

The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract.

The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Employer was not entitled to make the claim.

The Employer shall return the Performance Security to the Contractor within 21 days after receiving a copy of the Performance Certificate.

Without limitation to the provisions of the rest of this Sub-Clause, whenever the Engineer determines an addition or a reduction to the Contract Price as a result of a change in cost and/or legislation or as a result of a Variation amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Engineer's request promptly increase, or may decrease, as the case may be, the value of the Performance Security in that currency by an equal percentage.



**4.3 Contractor's Representative**

The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract.

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked in terms of Sub-Clause 6.9 [Contractor's Personnel], or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Contractor's Representative or appoint a replacement.

The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Engineer's prior consent, and the Engineer shall be notified accordingly.

The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Engineer].

The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Engineer has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

The Contractor's Representative shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. If the Contractor's Representative's delegates are not fluent in the said language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer.

**4.4 Subcontractors**

The Contractor shall not subcontract the whole of the Works.

The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor. Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall not be required to obtain consent to suppliers solely of Materials, or to a subcontract for which the Subcontractor is named in the Contract;
- (b) the prior consent of the Engineer shall be obtained to other proposed Subcontractors;
- (c) the Contractor shall give the Engineer not less than 28 days' notice of the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site; and
- (d) each subcontract shall include provisions which would entitle the Employer to require the subcontract to be assigned to the Employer under Sub-Clause 4.5 [Assignment of Benefit of Subcontract] (if or when applicable) or in the event of termination under Sub-Clause 15.2 [Termination by Employer].

The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.12 [Confidential Details] apply equally to each Subcontractor.

Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from the Country to be appointed as Subcontractors.

**4.5 Assignment of Benefit of Subcontract**

If a Subcontractor's obligations extend beyond the expiry date of the relevant Defects Notification Period and the Engineer, prior to this date, instructs the Contractor to assign the benefit of such obligations to the Employer, then the Contractor shall do so. Unless otherwise stated in the assignment, the Contractor shall have no liability to the Employer for the work carried out by the Subcontractor after the assignment takes effect.

**4.6 Co-operation**

The Contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:

- (a) the Employer's Personnel,
- (b) any other contractors employed by the Employer, and

- (c) the personnel of any legally constituted public authorities,

who may be employed in the execution on or near the Site of any work not included in the Contract.

Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to suffer delays and/or to incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.

If, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Engineer in the time and manner stated in the Specification.

#### 4.7 Setting Out

The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract or notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

The Employer shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.

If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/or Cost, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or

determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

**4.8 Safety  
Procedures**

The Contractor shall:

- (a) comply with all applicable safety regulations,
- (b) take care for the safety of all persons entitled to be on the Site,
- (c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Employer's Taking Over], and
- (e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

**4.9 Quality  
Assurance**

The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Engineer shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Engineer for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

**4.10 Site Data**

The Employer shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Employer's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Employer shall similarly make available to the Contractor all such data which come into the Employer's

possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

- (a) the form and nature of the Site, including sub-surface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,
- (d) the Laws, procedures and labour practices of the Country, and
- (e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

**4.11 Sufficiency of the Accepted Contract Amount** The Contractor shall be deemed to:

- (a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and
- (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data].

Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper execution and completion of the Works and the remedying of any defects.

**4.12 Unforeseeable  
Physical  
Conditions**

In this Sub-Clause, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.

If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable, the Contractor shall give notice to the Engineer as soon as practicable.

This notice shall describe the physical conditions, so that they can be inspected by the Engineer, and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Engineer may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to notice under Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

Upon receiving such notice and inspecting and/or investigating these physical conditions, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Engineer may also review whether other physical conditions in similar parts of the Works (if any) were more favourable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favourable conditions were encountered, the Engineer may proceed in accordance with Sub-Clause 3.5 [Determinations]

to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.

The Engineer shall take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which shall be made available by the Contractor, but shall not be bound by the Contractor's interpretation of any such evidence.

**4.13 Rights of Way and Facilities**

Unless otherwise specified in the Contract the Employer shall provide free of charge unrestricted access to and possession of the Site including special and/or temporary rights-of-way which are necessary for the Works. The Contractor shall obtain, at his risk and cost, any additional rights of way or facilities outside the Site which he may require for the purposes of the Works.

**4.14 Avoidance of Interference**

The Contractor shall not interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.

The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

**4.15 Access Route**

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site at Base Date. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

- (a) the Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
- (b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
- (c) the Employer shall not be responsible for any claims which may arise from the use or otherwise of any access route;
- (d) the Employer does not guarantee the suitability or availability of particular access routes; and
- (e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

**4.16 Transport of Goods**

Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall give the Engineer not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- (b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- (c) the Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.

**4.17 Contractor's Equipment**

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Engineer. However, consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.



**4.18 Protection of the Environment**

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

**4.19 Electricity, Water and Gas**

The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require for his construction activities and to the extent defined in the Specifications, for the tests.

The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specification. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.

The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Employer.

**4.20 Employer's  
Equipment and  
Free-Issue  
Materials**

The Employer shall make the Employer's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Specification. Unless otherwise stated in the Specification:

- (a) the Employer shall be responsible for the Employer's Equipment, except that
- (b) the Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

The appropriate quantities and the amounts due (at such stated prices) for the use of Employer's Equipment shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Employer.

The Employer shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Specification. The Employer shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them, and shall promptly give notice to the Engineer of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Employer shall immediately rectify the notified shortage, defect or default.

After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Employer of liability for any shortage, defect or default not apparent from a visual inspection.

**4.21 Progress Reports**

Unless otherwise stated in the Particular Conditions, monthly progress reports shall be prepared by the Contractor and submitted to the Engineer in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
- (b) photographs showing the status of manufacture and of progress on the Site;
- (c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
  - (i) commencement of manufacture,
  - (ii) Contractor's inspections,
  - (iii) tests, and
  - (iv) shipment and arrival at the Site;

- (d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];
- (e) copies of quality assurance documents, test results and certificates of Materials;
- (f) list of notices given under Sub-Clause 2.5 [Employer's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];
- (g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- (h) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardise the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

**4.22 Security of the Site**

Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall be responsible for keeping unauthorised persons off the Site, and
- (b) authorised persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the Contractor, by the Employer or the Engineer, as authorised personnel of the Employer's other contractors on the Site.

**4.23 Contractor's Operations on Site**

The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Engineer as additional working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all

Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

#### 4.24 Fossils

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

### 5. Nominated Subcontractors

#### 5.1 Definition of "nominated Subcontractor"

In the Contract, "nominated Subcontractor" means a Subcontractor:

- (a) who is stated in the Contract as being a nominated Subcontractor, or
- (b) whom the Engineer, under Clause 13 [Variations and Adjustments], instructs the Contractor to employ as a Subcontractor subject to Sub-Clause 5.2 [Objection to Notification].

**5.2 Objection to Nomination**

The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Engineer as soon as practicable, with supporting particulars. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Employer agrees in writing to indemnify the Contractor against and from the consequences of the matter:

- (a) there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength;
- (b) the nominated Subcontractor does not accept to indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or
- (c) the nominated Subcontractor does not accept to enter into a subcontract which specifies that, for the subcontracted work (including design, if any), the nominated Subcontractor shall:
  - (i) undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge his obligations and liabilities under the Contract;
  - (ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfil these liabilities; and
  - (iii) be paid only if and when the Contractor has received from the Employer payments for sums due under the Subcontract referred to under Sub-Clause 5.3 [Payment to nominated Subcontractors].

**5.3 Payments to nominated Subcontractors**

The Contractor shall pay to the nominated Subcontractor the amounts shown on the nominated Subcontractor's invoices approved by the Contractor which the Engineer certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.5

[Provisional Sums], except as stated in Sub-Clause 5.4 [Evidence of Payments].

**5.4 Evidence of Payments**

Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Engineer may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

- (a) submits this reasonable evidence to the Engineer, or
- (b)
  - (i) satisfies the Engineer in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and
  - (ii) submits to the Engineer reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement,

then the Employer may (at his sole discretion) pay, direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Employer, the amount which the nominated Subcontractor was directly paid by the Employer.

**6. Staff and Labour**

**6.1 Engagement of Staff and Labour**

Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, feeding, transport, and, when appropriate, housing.

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within the Country.

**6.2 Rates of Wages and Conditions of Labour**

The Contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the Laws of the Country for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.

**6.3 Persons in the Service of Employer**

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Employer's Personnel.

**6.4 Labour Laws**

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

**6.5 Working Hours**

No work shall be carried out on the Site on locally recognised days of rest, or outside the normal working hours stated in the Contract Data, unless:

- (a) otherwise stated in the Contract,
- (b) the Engineer gives consent, or
- (c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer.



**6.6 Facilities for Staff and Labour**

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

**6.7 Health and Safety**

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require.

**HIV-AIDS Prevention.** The Contractor shall conduct an HIV-AIDS awareness programme via an approved service provider, and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.

The Contractor shall throughout the contract (including the Defects Notification Period): (i) conduct Information, Education and Consultation Communication (IEC)

campaigns, at least every other month, addressed to all the Site staff and labor (including all the Contractor's employees, all Sub-Contractors and Consultants' employees, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labor as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counseling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labor.

The Contractor shall include in the program to be submitted for the execution of the Works under Sub-Clause 8.3 [Programme] an alleviation program for Site staff and labour and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Sub-Clause and the related specification. For each component, the program shall detail the resources to be provided or utilized and any related sub-contracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and implementation this program shall not exceed the Provisional Sum dedicated for this purpose.

**6.8 Contractor's  
Superintendence**

Throughout the execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

**6.9 Contractor's Personnel**

The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

- (a) persists in any misconduct or lack of care,
- (b) carries out duties incompetently or negligently,
- (c) fails to conform with any provisions of the Contract, or
- (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment.

If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

**6.10 Records of Contractor's Personnel and Equipment**

The Contractor shall submit, to the Engineer, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

**6.11 Disorderly Conduct**

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

**6.12 Foreign Personnel**

The Contractor may bring in to the Country any foreign personnel who are necessary for the execution of the Works to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required residence visas and work permits. The Employer will, if requested by the Contractor, use his best endeavours in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national, or government permission required for bringing in the Contractor's personnel.

The Contractor shall be responsible for the return of these personnel to the place where they were recruited or to their domicile. In the event of the death in the Country of any of these personnel or members of their families, the Contractor

shall similarly be responsible for making the appropriate arrangements for their return or burial.

- 6.13 Supply of Foodstuffs** The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.
- 6.14 Supply of Water** The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.
- 6.15 Measures against Insect and Pest Nuisance** The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.
- 6.16 Alcoholic Liquor or Drugs** The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter or disposal thereto by Contractor's Personnel.
- 6.17 Arms and Ammunition** The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.
- 6.18 Festivals and Religious Customs** The Contractor shall respect the Country's recognized festivals, days of rest and religious or other customs.
- 6.19 Funeral Arrangements** The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of his local employees who may die while engaged upon the Works.
- 6.20 Prohibition of Forced or Compulsory Labour** The contractor shall not employ "forced or compulsory labour" in any form. "Forced or compulsory labour" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.
- 6.21 Prohibition of Harmful Child Labour** The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

**6.22 Employment  
Records of  
Workers**

The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and submitted to the Engineer, and these records shall be available for inspection by Auditors during normal working hours. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment].

**7. Plant, Materials and Workmanship**

**7.1 Manner of  
Execution**

The Contractor shall carry out the manufacture of Plant, the production and manufacture of Materials, and all other execution of the Works:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognised good practice, and
- (c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

**7.2 Samples**

The Contractor shall submit the following samples of Materials, and relevant information, to the Engineer for consent prior to using the Materials in or for the Works:

- (a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and
- (b) additional samples instructed by the Engineer as a Variation.

Each sample shall be labelled as to origin and intended use in the Works.

**7.3 Inspection**

The Employer's Personnel shall at all reasonable times:

- (a) have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
- (b) during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

The Contractor shall give the Employer's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

The Contractor shall give notice to the Engineer whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Engineer shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Engineer does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Engineer, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

#### 7.4 Testing

This Sub-Clause shall apply to all tests specified in the Contract, other than the Tests after Completion (if any).

Except as otherwise specified in the Contract, the Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Engineer, the time and place for the specified testing of any Plant, Materials and other parts of the Works.

The Engineer may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

The Engineer shall give the Contractor not less than 24 hours' notice of the Engineer's intention to attend the tests. If the Engineer does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer, and the tests shall then be deemed to have been made in the Engineer's presence.

If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer is responsible, the Contractor shall give

notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall promptly forward to the Engineer duly certified reports of the tests. When the specified tests have been passed, the Engineer shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Engineer has not attended the tests, he shall be deemed to have accepted the readings as accurate.

#### **7.5 Rejection**

If, as a result of an examination, inspection, measurement or testing, any Plant, Materials or workmanship is found to be defective or otherwise not in accordance with the Contract, the Engineer may reject the Plant, Materials or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.

If the Engineer requires this Plant, Materials or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay these costs to the Employer.

#### **7.6 Remedial Work**

Notwithstanding any previous test or certification, the Engineer may instruct the Contractor to:

- (a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,
- (b) remove and re-execute any other work which is not in accordance with the Contract, and

- (c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).

If the Contractor fails to comply with the instruction, the Employer shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay to the Employer all costs arising from this failure.

#### **7.7 Ownership of Plant and Materials**

Except otherwise specified in the Contract, each item of Plant and Materials shall, to the extent consistent with the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances:

- (a) when it is incorporated in the Works;
- (b) when the Contractor is paid the corresponding value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension].

#### **7.8 Royalties**

Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments for:

- (a) natural Materials obtained from outside the Site, and
- (b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.



## 8. Commencement, Delays and Suspension

**8.1 Commencement of Works** Except otherwise specified in the Particular Conditions, the Commencement Date shall be the date at which the following precedent conditions have all been fulfilled and the Engineer's instruction recording the agreement of both Parties on such fulfilment and instructing to commence the Works is received by the Contractor:

- (a) signature of the Contract Agreement by both Parties, and if required, approval of the Contract by relevant authorities in the Country;
- (b) delivery to the Contractor of reasonable evidence of the Employer's Financial arrangements (under Sub-Clause 2.4 [Employer's Financial Arrangements])
- (c) except if otherwise specified in the Contract Data, possession of the Site given to the Contractor together with such permission(s) under (a) of Sub-Clause 1.13 [Compliance with Laws] as required for the commencement of the Works; and
- (d) receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding bank guarantee has been delivered by the Contractor.
- (e) If the said Engineer's instruction is not received by the Contractor within 180 days from his receipt of the Letter of Acceptance, the Contractor shall be entitled to terminate the Contract under Sub-Clause 16.2 [Termination by Contractor].

The Contractor shall commence the execution of the Works as soon as is reasonably practicable after the Commencement Date, and shall then proceed with the Works with due expedition and without delay.

**8.2 Time for Completion** The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:

- (a) achieving the passing of the Tests on Completion, and
- (b) completing all work which is stated in the Contract as being required for the Works or Section to be

considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections].

### 8.3 Programme

The Contractor shall submit a detailed time programme to the Engineer within 28 days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:

- (a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,
- (b) each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
- (c) the sequence and timing of inspections and tests specified in the Contract, and
- (d) a supporting report which includes:
  - (i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
  - (ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.

Unless the Engineer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.

The Contractor shall promptly give notice to the Engineer of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price, or delay the execution of the Works. The Engineer may require the Contractor to submit an estimate of the anticipated effect

of the future event or circumstances, and/or a proposal under Sub-Clause 13.3 [Variation Procedure].

If, at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer in accordance with this Sub-Clause.

**8.4 Extension of  
Time for  
Completion**

The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking-Over of the Works and Sections] is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]) or other substantial change in the quantity of an item of work included in the Contract,
- (b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
- (e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors.

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Engineer in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Engineer shall review previous determinations and may increase, but shall not decrease, the total extension of time.

**8.5 Delays Caused by Authorities** If the following conditions apply, namely:

- (a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,
- (b) these authorities delay or disrupt the Contractor's work, and
- (c) the delay or disruption was Unforeseeable,

then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].

**8.6 Rate of Progress** If, at any time:

- (a) actual progress is too slow to complete within the Time for Completion, and/or
- (b) progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme],

other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Engineer may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

Unless the Engineer notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Employer to incur additional costs, the Contractor shall subject to notice under Sub-Clause 2.5 [Employer's Claims] pay these costs to the Employer, in addition to delay damages (if any) under Sub-Clause 8.7 [Delay Damages] below.

Additional costs of revised methods, including acceleration measures, instructed by the Engineer to reduce delays resulting from causes listed under Sub-Clause 8.4 [Extension of Time for Completion] shall be paid by the Employer, without generating, however, any other additional payment benefit to the Contractor.

**8.7 Delay Damages**

If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall be subject to notice under Sub-Clause 2.5 [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the Contract Data, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Contract Data.

These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Employer] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

**8.8 Suspension of Work**

The Engineer may at any time instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage.

The Engineer may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.9 [Consequences of Suspension], 8.10 [Payment for Plant and Materials in Event of Suspension] and 8.11 [Prolonged Suspension] shall not apply.

**8.9 Consequences of Suspension**

If the Contractor suffers delay and/or incurs Cost from complying with the Engineer's instructions under Sub-Clause 8.8 [Suspension of Work] and/or from resuming the work, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [Suspension of Work].

**8.10 Payment for Plant and Materials in Event of Suspension**

The Contractor shall be entitled to payment of the value (as at the date of suspension) of Plant and/or Materials which have not been delivered to Site, if:

- (a) the work on Plant or delivery of Plant and/or Materials has been suspended for more than 28 days, and
- (b) the Contractor has marked the Plant and/or Materials as the Employer's property in accordance with the Engineer's instructions.

**8.11 Prolonged Suspension**

If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 84 days, the Contractor may request the Engineer's permission to proceed. If the Engineer does not give permission within 28 days after being requested to do so, the Contractor may, by giving notice to the Engineer, treat the suspension as an omission under Clause 13 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [Termination by Contractor].

**8.12 Resumption of Work**

After the permission or instruction to proceed is given, the Contractor and the Engineer shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension after receiving from the Engineer an instruction to this effect under Clause 13 [Variations and Adjustments].

## 9. Tests on Completion

### 9.1 Contractor's Obligations

The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with subparagraph (d) of Sub-Clause 4.1 [Contractor's General Obligations].

The Contractor shall give to the Engineer not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Engineer shall instruct.

In considering the results of the Tests on Completion, the Engineer shall make allowances for the effect of any use of the Works by the Employer on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on Completion, the Contractor shall submit a certified report of the results of these Tests to the Engineer.

### 9.2 Delayed Tests

If the Tests on Completion are being unduly delayed by the Employer, Sub-Clause 7.4 [Testing] (fifth paragraph) and/or Sub-Clause 10.3 [Interference with Tests on Completion] shall be applicable.

If the Tests on Completion are being unduly delayed by the Contractor, the Engineer may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Engineer.

If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Employer's Personnel may proceed with the Tests at the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted as accurate.

### 9.3 Retesting

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [Rejection] shall apply, and the Engineer or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

**9.4 Failure to Pass Tests on Completion**

If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Engineer shall be entitled to:

- (a) order further repetition of Tests on Completion under Sub-Clause 9.3;
- (b) if the failure deprives the Employer of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Employer shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 11.4 [Failure to Remedy Defects]; or
- (c) issue a Taking-Over Certificate, if the Employer so requests.

In the event of sub-paragraph (c), the Contractor shall proceed in accordance with all other obligations under the Contract, and the Contract Price shall be reduced by such amount as shall be appropriate to cover the reduced value to the Employer as a result of this failure. Unless the relevant reduction for this failure is stated (or its method of calculation is defined) in the Contract, the Employer may require the reduction to be (i) agreed by both Parties (in full satisfaction of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations].

**10. Employer's Taking Over**

**10.1 Taking Over of the Works and Sections**

Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Employer when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [Time for Completion] and except as allowed in sub-paragraph (a) below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

The Contractor may apply by notice to the Engineer for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.



The Engineer shall, within 28 days after receiving the Contractor's application:

- (a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or
- (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Engineer fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

#### **10.2 Taking Over of Parts of the Works**

The Engineer may, at the sole discretion of the Employer, issue a Taking-Over Certificate for any part of the Permanent Works.

The Employer shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Engineer has issued a Taking-Over Certificate for this part. However, if the Employer does use any part of the Works before the Taking-Over Certificate is issued:

- (a) the part which is used shall be deemed to have been taken over as from the date on which it is used,
- (b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Employer, and
- (c) if requested by the Contractor, the Engineer shall issue a Taking-Over Certificate for this part.

After the Engineer has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry

out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Notification Period.

If the Contractor incurs Cost as a result of the Employer taking over and/or using a part of the Works, other than such use as is specified in the Contract or agreed by the Contractor, the Contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such Cost plus profit, which shall be included in the Contract Price. After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this Cost and profit.

If a Taking-Over Certificate has been issued for a part of the Works (other than a Section), the delay damages thereafter for completion of the remainder of the Works shall be reduced. Similarly, the delay damages for the remainder of the Section (if any) in which this part is included shall also be reduced. For any period of delay after the date stated in this Taking-Over Certificate, the proportional reduction in these delay damages shall be calculated as the proportion which the value of the part so certified bears to the value of the Works or Section (as the case may be) as a whole. The Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these proportions. The provisions of this paragraph shall only apply to the daily rate of delay damages under Sub-Clause 8.7 [Delay Damages], and shall not affect the maximum amount of these damages.

**10.3 Interference with Tests on Completion**

If the Contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which the Employer is responsible, the Employer shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.

The Engineer shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Engineer shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

**10.4 Surfaces  
Requiring  
Reinstatement**

Except as otherwise stated in a Taking-Over Certificate, a certificate for a Section or part of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

**11. Defects Liability**

**11.1 Completion of  
Outstanding  
Work and  
Remedying  
Defects**

In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the Contractor shall:

- (a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and
- (b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Employer on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).

If a defect appears or damage occurs, the Contractor shall be notified accordingly, by (or on behalf of) the Employer.

**11.2 Cost of  
Remedying  
Defects**

All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:

- (a) any design for which the Contractor is responsible,

- (b) Plant, Materials or workmanship not being in accordance with the Contract, or
- (c) failure by the Contractor to comply with any other obligation.

If and to the extent that such work is attributable to any other cause, the Contractor shall be notified promptly by (or on behalf of) the Employer and Sub-Clause 13.3 [Variation Procedure] shall apply.

**11.3 Extension of  
Defects  
Notification  
Period**

The Employer shall be entitled subject to Sub-Clause 2.5 [Employer's Claims] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or by reason of a damage attributable to the Contractor. However, a Defects Notification Period shall not be extended by more than two years.

If delivery and/or erection of Plant and/or Materials was suspended under Sub-Clause 8.8 [Suspension of Work] or Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work], the Contractor's obligations under this Clause shall not apply to any defects or damage occurring more than two years after the Defects Notification Period for the Plant and/or Materials would otherwise have expired.

**11.4 Failure to  
Remedy Defects**

If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by (or on behalf of) the Employer, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.

If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Employer may (at his option):

- (a) carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay to the Employer the costs reasonably incurred by the Employer in remedying the defect or damage;
- (b) require the Engineer to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [Determinations]; or
- (c) if the defect or damage deprives the Employer of substantially the whole benefit of the Works or any major part of the Works, terminate the Contract as a whole, or in respect of such major part which cannot be put to the intended use. Without prejudice to any other rights, under the Contract or otherwise, the Employer shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

**11.5 Removal of Defective Work**

If the defect or damage cannot be remedied expeditiously on the Site and the Employer gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security.

**11.6 Further Tests**

If the work of remedying of any defect or damage may affect the performance of the Works, the Engineer may require the repetition of any of the tests described in the Contract. The requirement shall be made by notice within 28 days after the defect or damage is remedied.

These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [Cost of Remedying Defects], for the cost of the remedial work.

- 11.7 Right of Access** Until the Performance Certificate has been issued, the Contractor shall have such right of access to the Works as is reasonably required in order to comply with this Clause, except as may be inconsistent with the Employer's reasonable security restrictions.
- 11.8 Contractor to Search** The Contractor shall, if required by the Engineer, search for the cause of any defect, under the direction of the Engineer. Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Cost of the search plus profit shall be agreed or determined by the Engineer in accordance with Sub-Clause 3.5 [Determinations] and shall be included in the Contract Price.
- 11.9 Performance Certificate** Performance of the Contractor's obligations shall not be considered to have been completed until the Engineer has issued the Performance Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.
- The Engineer shall issue the Performance Certificate within 28 days after the latest of the expiry dates of the Defects Notification Periods, or as soon thereafter as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects. A copy of the Performance Certificate shall be issued to the Employer.
- Only the Performance Certificate shall be deemed to constitute acceptance of the Works.
- 11.10 Unfulfilled Obligations** After the Performance Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.
- 11.11 Clearance of Site** Upon receiving the Performance Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.
- If all these items have not been removed within 28 days after receipt by the Contractor of the Performance Certificate, the Employer may sell or otherwise dispose of any remaining items. The Employer shall be entitled to be paid the costs

incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Employer's costs, the Contractor shall pay the outstanding balance to the Employer.

## 12. Measurement and Evaluation

### 12.1 Works to be Measured

The Works shall be measured, and valued for payment, in accordance with this Clause. The Contractor shall show in each application under Sub-Clauses 14.3 [Application for Interim Payment Certificates], 14.10 [Statement at Completion], and 14.11 [Application for Final Payment Certificate] the quantities and other particulars detailing the amounts which he considers to be entitled under the Contract.

Whenever the Engineer requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall:

- (a) promptly either attend or send another qualified representative to assist the Engineer in making the measurement, and
- (b) supply any particulars requested by the Engineer.

If the Contractor fails to attend or send a representative, the measurement made by (or on behalf of) the Engineer shall be accepted as accurate.

Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by the Engineer. The Contractor shall, as and when requested, attend to examine and agree the records with the Engineer, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.

If the Contractor examines and disagrees the records, and/or does not sign them as agreed, then the Contractor shall give notice to the Engineer of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Engineer shall review the records and either confirm or vary them and certify the payment of the undisputed part. If the

Contractor does not so give notice to the Engineer within 14 days after being requested to examine the records, they shall be accepted as accurate.

**12.2 Method of Measurement**

Except as otherwise stated in the Contract and notwithstanding local practice:

- (a) measurement shall be made of the net actual quantity of each item of the Permanent Works, and
- (b) the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules.

**12.3 Evaluation**

Except as otherwise stated in the Contract, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the Contract Price by evaluating each item of work, applying the measurement agreed or determined in accordance with the above Sub-Clauses 12.1 [Works to be Measured] and 12.2 [Method of Measurement] and the appropriate rate or price for the item.

For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the Contract or, if there is no such item, specified for similar work.

Any item of work included in the Bill of Quantities for which no rate or price was specified shall be considered as included in other rates and prices in the Bill of Quantities and will not be paid for separately.

However, a new rate or price shall be appropriate for an item of work if:

- (a)
  - (i) the measured quantity of the item is changed by more than 25% from the quantity of this item in the Bill of Quantities or other Schedule,
  - (ii) this change in quantity multiplied by such specified rate for this item exceeds 0.25% of the Accepted Contract Amount,
  - (iii) this change in quantity directly changes the Cost per unit quantity of this item by more than 1%, and



- (iv) this item is not specified in the Contract as a "fixed rate item";

or

(b)

- (i) the work is instructed under Clause 13 [Variations and Adjustments],
- (ii) no rate or price is specified in the Contract for this item, and
- (iii) no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the Contract.

Each new rate or price shall be derived from any relevant rates or prices in the Contract, with reasonable adjustments to take account of the matters described in sub-paragraph (a) and/or (b), as applicable. If no rates or prices are relevant for the derivation of a new rate or price, it shall be derived from the reasonable Cost of executing the work, together with profit, taking account of any other relevant matters.

Until such time as an appropriate rate or price is agreed or determined, the Engineer shall determine a provisional rate or price for the purposes of Interim Payment Certificates as soon as the concerned Works commences.

#### 12.4 Omissions

Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:

- (a) the Contractor will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount;
- (b) the omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and
- (c) this cost is not deemed to be included in the evaluation of any substituted work;

then the Contractor shall give notice to the Engineer accordingly, with supporting particulars. Upon receiving this

notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this cost, which shall be included in the Contract Price.

### 13. Variations and Adjustments

#### 13.1 Right to Vary

Variations may be initiated by the Engineer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal.

The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Engineer stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, or (ii) such Variation triggers a substantial change in the sequence or progress of the Works. Upon receiving this notice, the Engineer shall cancel, confirm or vary the instruction.

Each Variation may include:

- (a) changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),
- (b) changes to the quality and other characteristics of any item of work,
- (c) changes to the levels, positions and/or dimensions of any part of the Works,
- (d) omission of any work unless it is to be carried out by others,
- (e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or
- (f) changes to the sequence or timing of the execution of the Works.

The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Engineer instructs or approves a Variation.

13.2 Value  
Engineering

The Contractor may, at any time, submit to the Engineer a written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Employer of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Employer of the completed Works, or (iv) otherwise be of benefit to the Employer.

The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.3 [Variation Procedure].

If a proposal, which is approved by the Engineer, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties:

- (a) the Contractor shall design this part,
- (b) sub-paragraphs (a) to (d) of Sub-Clause 4.1 [Contractor's General Obligations] shall apply, and
- (c) if this change results in a reduction in the contract value of this part, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine a fee, which shall be included in the Contract Price. This fee shall be half (50%) of the difference between the following amounts:
  - (i) such reduction in contract value, resulting from the change, excluding adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost], and
  - (ii) the reduction (if any) in the value to the Employer of the varied works, taking account of any reductions in quality, anticipated life or operational efficiencies.

However, if amount (i) is less than amount (ii), there shall not be a fee.

### 13.3 Variation Procedure

If the Engineer requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:

- (a) a description of the proposed work to be performed and a programme for its execution,
- (b) the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 8.3 [Programme] and to the Time for Completion, and
- (c) the Contractor's proposal for evaluation of the Variation.

The Engineer shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.

Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Engineer to the Contractor, who shall acknowledge receipt.

Each Variation shall be evaluated in accordance with Clause 12 [Measurement and Evaluation], unless the Engineer instructs or approves otherwise in accordance with this Clause.

### 13.4 Payment in Applicable Currencies

If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.

**13.5 Provisional Sums** Each Provisional Sum shall only be used, in whole or in part, in accordance with the Engineer's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Engineer shall have instructed. For each Provisional Sum, the Engineer may instruct:

- (a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and/or
- (b) Plant, Materials or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]) or otherwise; and for which there shall be included in the Contract Price:
  - (i) the actual amounts paid (or due to be paid) by the Contractor, and
  - (ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in the Contract Data shall be applied.

The Contractor shall, when required by the Engineer, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

**13.6 Daywork**

For work of a minor or incidental nature, the Engineer may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the Daywork Schedule included in the Contract, and the following procedure shall apply. If a Daywork Schedule is not included in the Contract, this Sub-Clause shall not apply.

Before ordering Goods for the work, the Contractor shall submit quotations to the Engineer. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

Except for any items for which the Daywork Schedule specifies that payment is not due, the Contractor shall deliver each day to the Engineer accurate statements in duplicate which shall include the following details of the resources used in executing the previous day's work:

- (a) the names, occupations and time of Contractor's Personnel,
- (b) the identification, type and time of Contractor's Equipment and Temporary Works, and
- (c) the quantities and types of Plant and Materials used.

One copy of each statement will, if correct, or when agreed, be signed by the Engineer and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Engineer, prior to their inclusion in the next Statement under Sub-Clause 14.3 [Application for Interim Payment Certificates].

**13.7 Adjustments for  
Changes in  
Legislation**

The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.

If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

Notwithstanding the foregoing, the Contractor shall not be entitled to such an extension of time if the relevant delay has

already have been taken into account in determining an extension and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the table of adjustment data in accordance with the provisions of Sub-Clause 13.8 [Adjustments for Changes in Cost].

### 13.8 Adjustments for Changes in Cost

In this Sub-Clause, "table of adjustment data" means the completed table of adjustment data for local and foreign currencies included in the Schedules. If there is no such table of adjustment data, this Sub-Clause shall not apply.

If this Sub-Clause applies, the amounts payable to the Contractor shall be adjusted for rises or falls in the cost of labour, Goods and other inputs to the Works, by the addition or deduction of the amounts determined by the formulae prescribed in this Sub-Clause. To the extent that full compensation for any rise or fall in Costs is not covered by the provisions of this or other Clauses, the Accepted Contract Amount shall be deemed to have included amounts to cover the contingency of other rises and falls in costs.

The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulae for each of the currencies in which the Contract Price is payable. No adjustment is to be applied to work valued on the basis of Cost or current prices. The formulae shall be of the following general type:

$P_n = a + b L_n / L_o + c E_n / E_o + d M_n / M_o + \dots$  where:

" $P_n$ " is the adjustment multiplier to be applied to the estimated contract value in the relevant currency of the work carried out in period "n", this period being a month unless otherwise stated in the Contract Data ;

"a" is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;

"b", "c", "d", ... are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labour, equipment and materials;

“Ln”, “En”, “Mn”, ... are the current cost indices or reference prices for period “n”, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates); and

“Lo”, “Eo”, “Mo”, ... are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.

The cost indices or reference prices stated in the table of adjustment data shall be used. If their source is in doubt, it shall be determined by the Engineer. For this purpose, reference shall be made to the values of the indices at stated dates (quoted in the fourth and fifth columns respectively of the table) for the purposes of clarification of the source; although these dates (and thus these values) may not correspond to the base cost indices.

In cases where the “currency of index” (stated in the table) is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the central bank of the Country, of this relevant currency on the above date for which the index is required to be applicable.

Until such time as each current cost index is available, the Engineer shall determine a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.

If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices thereafter shall be made using either (i) each index or price applicable on the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price: whichever is more favourable to the Employer.

The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced or inapplicable, as a result of Variations.



## 14. Contract Price and Payment

### 14.1 The Contract Price

Unless otherwise stated in the Particular Conditions:

- (a) the Contract Price shall be agreed or determined under Sub-Clause 12.3 [Evaluation] and be subject to adjustments in accordance with the Contract;
- (b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs except as stated in Sub-Clause 13.7 [Adjustments for Changes in Legislation];
- (c) any quantities which may be set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities:
  - (i) of the Works which the Contractor is required to execute, or
  - (ii) for the purposes of Clause 12 [Measurement and Evaluation]; and
- (d) the Contractor shall submit to the Engineer, within 28 days after the Commencement Date, a proposed breakdown of each lump sum price in the Schedules. The Engineer may take account of the breakdown when preparing Payment Certificates, but shall not be bound by it.
- (e) Notwithstanding the provisions of subparagraph (b), Contractor's Equipment, including essential spare parts therefor, imported by the Contractor for the sole purpose of executing the Contract shall be exempt from the payment of import duties and taxes upon importation.

### 14.2 Advance Payment

The Employer shall make an advance payment, as an interest-free loan for mobilisation and cash flow support, when the Contractor submits a guarantee in accordance with this Sub-

Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions, shall be as stated in the Contract Data.

Unless and until the Employer receives this guarantee, or if the total advance payment is not stated in the Contract Data, this Sub-Clause shall not apply.

The Engineer shall deliver to the Employer and to the Contractor an Interim Payment Certificate for the advance payment or its first instalment after receiving a Statement (under Sub-Clause 14.3 [Application for Interim Payment Certificates]) and after the Employer receives (i) the Performance Security in accordance with Sub-Clause 4.2 [Performance Security] and (ii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer.

The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount shall be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.

Unless stated otherwise in the Contract Data, the advance payment shall be repaid through percentage deductions from the interim payments determined by the Engineer in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates], as follows:

- (a) deductions shall commence in the next interim Payment Certificate following that in which the total of all certified interim payments (excluding the advance payment and deductions and repayments of retention) exceeds 30 percent (30%) of the Accepted Contract Amount less Provisional Sums; and
- (b) deductions shall be made at the amortisation rate stated in the Contract Data of the amount of each Interim Payment Certificate (excluding the advance payment and deductions for its repayments as well as deductions for

retention money) in the currencies and proportions of the advance payment until such time as the advance payment has been repaid; provided that the advance payment shall be completely repaid prior to the time when 90 per cent (90%) of the Accepted Contract Amount less Provisional Sums has been certified for payment.

If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Employer], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as the case may be), the whole of the balance then outstanding shall immediately become due and in case of termination under Clause 15 [Termination by Employer] and Sub-Clause 19.6 [Optional Termination, Payment and Release], payable by the Contractor to the Employer.

**14.3 Application for  
Interim Payment  
Certificates**

The Contractor shall submit a Statement in six copies to the Engineer after the end of each month, in a form approved by the Engineer, showing in detail the amounts to which the Contractor considers himself to be entitled, together with supporting documents which shall include the report on the progress during this month in accordance with Sub-Clause 4.21 [Progress Reports].

The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:

- (a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (g) below);
- (b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost];
- (c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Contract Data to the total of the above amounts, until the amount so retained by the Employer reaches the limit of Retention Money (if any) stated in the Contract Data;

- (d) any amounts to be added for the advance payment and (if more than one instalment) and to be deducted for its repayments in accordance with Sub-Clause 14.2 [Advance Payment];
- (e) any amounts to be added and deducted for Plant and Materials in accordance with Sub-Clause 14.5 [Plant and Materials intended for the Works];
- (f) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 20 [Claims, Disputes and Arbitration]; and
- (g) the deduction of amounts certified in all previous Payment Certificates.

#### 14.4 Schedule of Payments

If the Contract includes a schedule of payments specifying the instalments in which the Contract Price will be paid, then unless otherwise stated in this schedule:

- (a) the instalments quoted in this schedule of payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates];
- (b) Sub-Clause 14.5 [Plant and Materials intended for the Works] shall not apply; and
- (c) if these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less or more than that on which this schedule of payments was based, then the Engineer may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine revised instalments, which shall take account of the extent to which progress is less or more than that on which the instalments were previously based.

If the Contract does not include a schedule of payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

**14.5 Plant and  
Materials  
intended for the  
Works**

If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3, (i) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and (ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates].

If the lists referred to in sub-paragraphs (b)(i) or (c)(i) below are not included in the Schedules, this Sub-Clause shall not apply.

The Engineer shall determine and certify each addition if the following conditions are satisfied:

- (a) the Contractor has:
  - (i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and
  - (ii) submitted a statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence;

and either:

- (b) the relevant Plant and Materials:
  - (i) are those listed in the Schedules for payment when shipped,
  - (ii) have been shipped to the Country, en route to the Site, in accordance with the Contract; and
  - (iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Engineer together with evidence of payment of freight and insurance, any other documents reasonably required, and a bank guarantee in a form and issued by an entity approved by the Employer in amounts and currencies equal to the amount due under this Sub-Clause: this guarantee may be in a similar form to the form referred to in Sub-Clause 14.2 [Advance Payment] and shall be valid until the

Plant and Materials are properly stored on Site and protected against loss, damage or deterioration;

or

- (c) the relevant Plant and Materials:
  - (i) are those listed in the Schedules for payment when delivered to the Site, and
  - (ii) have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration, and appear to be in accordance with the Contract.

The additional amount to be certified shall be the equivalent of eighty percent of the Engineer's determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-Clause and of the contract value of the Plant and Materials.

The currencies for this additional amount shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates]. At that time, the Payment Certificate shall include the applicable reduction which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.

**14.6 Issue of Interim  
Payment  
Certificates**

No amount will be certified or paid until the Employer has received and approved the Performance Security. Thereafter, the Engineer shall, within 28 days after receiving a Statement and supporting documents, deliver to the Employer and to the Contractor an Interim Payment Certificate which shall state the amount which the Engineer fairly determines to be due, with all supporting particulars for any reduction or withholding made by the Engineer on the Statement if any.

However, prior to issuing the Taking-Over Certificate for the Works, the Engineer shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the Contract Data. In this event, the Engineer shall give notice to the Contractor accordingly.

An Interim Payment Certificate shall not be withheld for any other reason, although:

- (a) if any thing supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
- (b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.

The Engineer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Engineer's acceptance, approval, consent or satisfaction.

#### 14.7 Payment

The Employer shall pay to the Contractor:

- (a) the first instalment of the advance payment within 42 days after issuing the Letter of Acceptance or within 21 days after receiving the documents in accordance with Sub-Clause 4.2 [Performance Security] and Sub-Clause 14.2 [Advance Payment], whichever is later;
- (b) the amount certified in each Interim Payment Certificate within 56 days after the Engineer receives the Statement and supporting documents or, at a time when the Bank's loan or credit (from which part of the payments to the Contractor is being made) is suspended, the amount shown on any statement submitted by the Contractor, within 14 days after such statement is submitted, any discrepancy being rectified in the next payment to the Contractor; and
- (c) the amount certified in the Final Payment Certificate within 56 days after the Employer receives this Payment Certificate or, at a time when the Bank's loan or credit (from which part of the payments to the Contractor is being made) is suspended, the undisputed amount shown in the Final Statement, within 56 days after the date of notification of the suspension in accordance with

Sub-Clause 16.2.

Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract.

**14.8 Delayed  
Payment**

If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [Payment], the Contractor shall be entitled to receive financing charges compounded monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 14.7 [Payment], irrespective (in the case of its sub-paragraph (b)) of the date on which any Interim Payment Certificate is issued.

Unless otherwise stated in the Particular Conditions, these financing charges shall be calculated at the annual rate of three percentage points above the discount rate of the central bank in the country of the currency of payment, or if not available, the interbank offered rate, and shall be paid in such currency.

The Contractor shall be entitled to this payment without formal notice or certification, and without prejudice to any other right or remedy.

**14.9 Payment of  
Retention Money**

When the Taking-Over Certificate has been issued for the Works, the first half of the Retention Money shall be certified by the Engineer for payment to the Contractor. If a

Taking-Over Certificate is issued for a Section or part of the Works, a proportion of the Retention Money shall be certified and paid. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section or part, by the estimated final Contract Price.

Promptly after the latest of the expiry dates of the Defects Notification Periods, the outstanding balance of the Retention Money shall be certified by the Engineer for payment to the Contractor. If a Taking-Over Certificate was issued for a Section, a proportion of the second half of the Retention Money shall be certified and paid promptly after the expiry date of the Defects Notification Period for the Section. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section by the estimated final Contract Price.



However, if any work remains to be executed under Clause 11 [Defects Liability], the Engineer shall be entitled to withhold certification of the estimated cost of this work until it has been executed.

When calculating these proportions, no account shall be taken of any adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost].

Unless otherwise stated in the Particular Conditions, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment by the Engineer, the Contractor shall be entitled to substitute a guarantee, in the form annexed to the Particular Conditions or in another form approved by the Employer and provided by an entity approved by the Employer, for the second half of the Retention Money. The Contractor shall ensure that the guarantee is in the amounts and currencies of the second half of the Retention Money and is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects, as specified for the Performance Security in Sub-Clause 4.2. On receipt by the Employer of the required guarantee, the Engineer shall certify and the Employer shall pay the second half of the Retention Money. The release of the second half of the Retention Money against a guarantee shall then be in lieu of the release under the second paragraph of this Sub-Clause. The Employer shall return the guarantee to the Contractor within 21 days after receiving a copy of the Performance Certificate.

If the Performance Security required under Sub-Clause 4.2 is in the form of a demand guarantee, and the amount guaranteed under it when the Taking-Over Certificate is issued is more than half of the Retention Money, then the Retention Money guarantee will not be required. If the amount guaranteed under the Performance Security when the Taking-Over Certificate is issued is less than half of the Retention Money, the Retention Money guarantee will only be required for the difference between half of the Retention Money and the amount guaranteed under the Performance Security.

#### **14.10 Statement at Completion**

Within 84 days after receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Engineer six copies of a Statement at completion with supporting

documents, in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates], showing:

- (a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,
- (b) any further sums which the Contractor considers to be due, and
- (c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

The Engineer shall then certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates].

#### **14.11 Application for Final Payment Certificate**

Within 56 days after receiving the Performance Certificate, the Contractor shall submit, to the Engineer, six copies of a draft final statement with supporting documents showing in detail in a form approved by the Engineer:

- (a) the value of all work done in accordance with the Contract, and
- (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require within 28 days from receipt of the said draft and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

However if, following discussions between the Engineer and the Contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.4 [Obtaining Dispute Board's Decision] or Sub-Clause 20.5 [Amicable Settlement], the Contractor shall then prepare and submit to the Employer (with a copy to the Engineer) a Final Statement.

**14.12 Discharge**

When submitting the Final Statement, the Contractor shall submit a discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Performance Security and the outstanding balance of this total, in which event the discharge shall be effective on such date.

**14.13 Issue of Final  
Payment  
Certificate**

Within 28 days after receiving the Final Statement and discharge in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Engineer shall deliver to the Employer and to the Contractor, the Final Payment Certificate which shall state:

- (a) the amount which he fairly determines is finally due, and
- (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, the balance (if any) due from the Employer to the Contractor or from the Contractor to the Employer, as the case may be.

If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Engineer shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 28 days, the Engineer shall issue the Final Payment Certificate for such amount as he fairly determines to be due.

**14.14 Cessation of  
Employer's  
Liability**

The Employer shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:

- (a) in the Final Statement and also
- (b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 [Statement at Completion].

However, this Sub-Clause shall not limit the Employer's liability under his indemnification obligations, or the Employer's liability in any case of fraud, deliberate default or reckless misconduct by the Employer.

#### 14.15 Currencies of Payment

The Contract Price shall be paid in the currency or currencies named in the Schedule of Payment Currencies. If more than one currency is so named, payments shall be made as follows:

- (a) if the Accepted Contract Amount was expressed in Local Currency only:
  - (i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Schedule of Payment Currencies, except as otherwise agreed by both Parties;
  - (ii) payments and deductions under Sub-Clause 13.5 [Provisional Sums] and Sub-Clause 13.7 [Adjustments for Changes in Legislation] shall be made in the applicable currencies and proportions; and
  - (iii) other payments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 14.3 [Application for Interim Payment Certificates] shall be made in the currencies and proportions specified in sub-paragraph (a)(i) above;
- (b) payment of the damages specified in the Contract Data, shall be made in the currencies and proportions specified in the Schedule of Payment Currencies;
- (c) other payments to the Employer by the Contractor shall be made in the currency in which the sum was expended by the Employer, or in such currency as may be agreed by both Parties;
- (d) if any amount payable by the Contractor to the Employer in a particular currency exceeds the sum payable by the Employer to the Contractor in that currency, the Employer may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and

- (e) if no rates of exchange are stated in the Schedule of Payment Currencies, they shall be those prevailing on the Base Date and determined by the central bank of the Country.

## 15. Termination by Employer

**15.1 Notice to Correct** If the Contractor fails to carry out any obligation under the Contract, the Engineer may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

**15.2 Termination by Employer** The Employer shall be entitled to terminate the Contract if the Contractor:

- (a) fails to comply with Sub-Clause 4.2 [Performance Security] or with a notice under Sub-Clause 15.1 [Notice to Correct],
- (b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
- (c) without reasonable excuse fails:
  - (i) to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or
  - (ii) to comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 28 days after receiving it,
- (d) subcontracts the whole of the Works or assigns the Contract without the required agreement,
- (e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or
- (f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:

- (i) for doing or forbearing to do any action in relation to the Contract, or
- (ii) for showing or forbearing to show favour or disfavour to any person in relation to the Contract,

or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination.

In any of these events or circumstances, the Employer may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (e) or (f), the Employer may by notice terminate the Contract immediately.

The Employer's election to terminate the Contract shall not prejudice any other rights of the Employer, under the Contract or otherwise.

The Contractor shall then leave the Site and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Engineer. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

After termination, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor.

The Employer shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer, these items may be sold by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

**15.3 Valuation at  
Date of  
Termination**

As soon as practicable after a notice of termination under Sub-Clause 15.2 [Termination by Employer] has taken effect, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of the Works, Goods and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract.

**15.4 Payment after  
Termination**

After a notice of termination under Sub-Clause 15.2 [Termination by Employer] has taken effect, the Employer may:

- (a) proceed in accordance with Sub-Clause 2.5 [Employer's Claims],
- (b) withhold further payments to the Contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Employer, have been established, and/or
- (c) recover from the Contractor any losses and damages incurred by the Employer and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation at Date of Termination]. After recovering any such losses, damages and extra costs, the Employer shall pay any balance to the Contractor.

**15.5 Employer's  
Entitlement to  
Termination for  
Convenience**

The Employer shall be entitled to terminate the Contract, at any time for the Employer's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 28 days after the later of the dates on which the Contractor receives this notice or the Employer returns the Performance Security. The Employer shall not terminate the Contract under this Sub-Clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor or to avoid a termination of the Contract by the Contractor under Sub-Clause 16.4 [Payment on Termination].

After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment] and shall be paid in accordance with Sub-Clause 19.6 [Optional Termination, Payment and Release].

## 15.6 Corrupt or Fraudulent Practices

If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive coercive, or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of Clause 15 shall apply as if such expulsion had been made under Sub-Clause 15.2 [Termination by Employer].

Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with Sub-Clause 6.9 [Contractor's Personnel].

For the purposes of this Sub-Clause:

- (i) "corrupt practice"<sup>1</sup> is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- (ii) "fraudulent practice"<sup>2</sup> is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- (iii) "collusive practice"<sup>3</sup> is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- (iv) "coercive practice"<sup>4</sup> is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a

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<sup>1</sup> "another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

<sup>2</sup> a "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

<sup>3</sup> "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

<sup>4</sup> a "party" refers to a participant in the procurement process or contract execution.



party;

(v) "obstructive practice" is

- (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
- (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 1.15 [Inspections and Audits by the Bank].

## **16. Suspension and Termination by Contractor**

### **16.1 Contractor's Entitlement to Suspend Work**

If the Engineer fails to certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] or the Employer fails to comply with Sub-Clause 2.4 [Employer's Financial Arrangements] or Sub-Clause 14.7 [Payment], the Contractor may, after giving not less than 21 days' notice to the Employer, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.

Notwithstanding the above, if the Bank has suspended disbursements under the loan or credit from which payments to the Contractor are being made, in whole or in part, for the execution of the Works, and no alternative funds are available as provided for in Sub-Clause 2.4 [Employer's Financial Arrangements], the Contractor may by notice suspend work or reduce the rate of work at any time, but not less than 7 days after the Recipient of OFID Financing having received the suspension notification from the Bank.

The Contractor's action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 [Delayed Payment] and to termination under Sub-Clause 16.2 [Termination by Contractor].

If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.

If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

**16.2 Termination by Contractor**

The Contractor shall be entitled to terminate the Contract if:

- (a) the Contractor does not receive the reasonable evidence within 42 days after giving notice under Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work] in respect of a failure to comply with Sub-Clause 2.4 [Employer's Financial Arrangements],
- (b) the Engineer fails, within 56 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,
- (c) the Contractor does not receive the amount due under an Interim Payment Certificate within 42 days after the expiry of the time stated in Sub-Clause 14.7 [Payment] within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [Employer's Claims]),

- (d) the Employer substantially fails to perform his obligations under the Contract in such manner as to materially and adversely affect the economic balance of the Contract and/or the ability of the Contractor to perform the Contract,
- (e) the Employer fails to comply with Sub-Clause 1.6 [Contract Agreement] or Sub-Clause 1.7 [Assignment],
- (f) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or
- (g) the Employer becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.
- (h) In the event the Bank suspends the loan or credit from which part of the payments to the Contractor are being made, if the Contractor has not received the sums due to him upon expiration of the 14 days referred to in Sub-Clause 14.7 [Payment] for payments under Interim Payment certificates, the Contractor may, without prejudice to the Contractor's entitlement to financing charges under Sub-Clause 14.8 [Delayed Payment], take one or both of the following actions, namely (i) suspend work or reduce the rate of work, and (ii) terminate his employment under the Contract by giving notice to the Employer, with a copy to the Engineer, such termination to take effect 14 days after the giving of the notice.
- (i) the Contractor does not receive the Engineer's instruction recording the agreement of both Parties on the fulfilment of the conditions for the Commencement of Works under Sub-Clause 8.1 [Commencement of Works].

In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Employer, terminate the Contract. However, in the case of sub-paragraph (f) or (g), the Contractor may by notice terminate the Contract immediately.

The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract or otherwise.

**16.3 Cessation of Work and Removal of Contractor's Equipment**

After a notice of termination under Sub-Clause 15.5 [Employer's Entitlement to Termination for Convenience], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 19.6 [Optional Termination, Payment and Release] has taken effect, the Contractor shall promptly:

- (a) cease all further work, except for such work as may have been instructed by the Engineer for the protection of life or property or for the safety of the Works,
- (b) hand over Contractor's Documents, Plant, Materials and other work, for which the Contractor has received payment, and
- (c) remove all other Goods from the Site, except as necessary for safety, and leave the Site.

**16.4 Payment on Termination**

After a notice of termination under Sub-Clause 16.2 [Termination by Contractor] has taken effect, the Employer shall promptly:

- (a) return the Performance Security to the Contractor,
- (b) pay the Contractor in accordance with Sub-Clause 19.6 [Optional Termination, Payment and Release], and
- (c) pay to the Contractor the amount of any loss or damage sustained by the Contractor as a result of this termination.

**17. Risk and Responsibility**

**17.1 Indemnities**

The Contractor shall indemnify and hold harmless the Employer, the Employer's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

- (a) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents,

and

- (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in subparagraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property].

**17.2 Contractor's  
Care of the  
Works**

The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Employer. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Employer.

After responsibility has accordingly passed to the Employer, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.

If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [Employer's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

### 17.3 Employer's Risks

The risks referred to in Sub-Clause 17.4 [Consequences of Employer's Risks] below, insofar as they directly affect the execution of the Works in the Country, are:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war, within the Country,
- (c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel,
- (d) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity,
- (e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract,
- (g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, and

- (h) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions.

**17.4 Consequences of Employer's Risks**

If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's Documents, the Contractor shall promptly give notice to the Engineer and shall rectify this loss or damage to the extent required by the Engineer.

If the Contractor suffers delay and/or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price. In the case of sub-paragraphs (f) and (g) of Sub-Clause 17.3 [Employer's Risks], Cost plus profit shall be payable.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

**17.5 Intellectual and Industrial Property Rights**

In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement.

Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.

The Employer shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:

- (a) an unavoidable result of the Contractor's compliance with the Contract, or

- (b) a result of any Works being used by the Employer:
  - (i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or
  - (ii) in conjunction with any thing not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract.

The Contractor shall indemnify and hold the Employer harmless against and from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.

If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.

#### **17.6 Limitation of Liability**

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4 (b) [Consequences of Employer's Risks] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights].

The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free-Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater



than one) to the Accepted Contract Amount, as stated in the Contract Data, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount.

This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

**17.7 Use of  
Employer's  
Accomoda-  
tion/Facilities**

The Contractor shall take full responsibility for the care of the Employer provided accommodation and facilities, if any, as detailed in the Specification, from the respective dates of hand-over to the Contractor until cessation of occupation (where hand-over or cessation of occupation may take place after the date stated in the Taking-Over Certificate for the Works).

If any loss or damage happens to any of the above items while the Contractor is responsible for their care arising from any cause whatsoever other than those for which the Employer is liable, the Contractor shall, at his own cost, rectify the loss or damage to the satisfaction of the Engineer.

**18. Insurance**

**18.1 General  
Requirements  
for Insurances**

In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.

Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms acceptable to the Contractor. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

Wherever the Employer is the insuring Party, each insurance shall be effected with insurers and in terms acceptable to the Contractor. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Employer shall act for

Employer's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

The relevant insuring Party shall, within the respective periods stated in the Contract Data (calculated from the Commencement Date), submit to the other Party:

- (a) evidence that the insurances described in this Clause have been effected, and
- (b) copies of the policies for the insurances described in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment] and Sub-Clause 18.3 [Insurance against Injury to Persons and Damage to Property].

When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Engineer.

Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.

Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.

If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage

and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.

Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Employer, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Employer in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.

Payments by one Party to the other Party shall be subject to Sub-Clause 2.5 [Employer's Claims] or Sub-Clause 20.1 [Contractor's Claims], as applicable.

The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to the insurance referred to Clause 18) with insurers from any eligible source country.

**18.2 Insurance for Works and Contractor's Equipment**

The insuring Party shall insure the Works, Plant, Materials and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works.

The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations (including those under Clause 11 [Defects Liability]).

The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported

to the Site and until it is no longer required as Contractor's Equipment.

Unless otherwise stated in the Particular Conditions, insurances under this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated to the Party actually bearing the costs of rectifying the loss or damage,
- (c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Employer's Risks],
- (d) shall also cover, to the extent specifically required in the bidding documents of the Contract, loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h) of Sub-Clause 17.3 [Employer's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Contract Data (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
- (e) may however exclude loss of, damage to, and reinstatement of:
  - (i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),
  - (ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,

- (iii) a part of the Works which has been taken over by the Employer, except to the extent that the Contractor is liable for the loss or damage, and
- (iv) Goods while they are not in the Country, subject to Sub-Clause 14.5 [Plant and Materials intended for the Works].

If, more than one year after the Base Date, the cover described in sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Employer, with supporting particulars. The Employer shall then (i) be entitled subject to Sub-Clause 2.5 [Employer's Claims] to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [General Requirements for Insurances].

**18.3 Insurance  
against Injury to  
Persons and  
Damage to  
Property**

The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

This insurance shall be for a limit per occurrence of not less than the amount stated in the Contract Data, with no limit on the number of occurrences. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.

Unless otherwise stated in the Particular Conditions, the insurances specified in this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties,

- (c) shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
- (d) may however exclude liability to the extent that it arises from:
  - (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,
  - (ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and
  - (iii) a cause listed in Sub-Clause 17.3 [Employer's Risks], except to the extent that cover is available at commercially reasonable terms.

**18.4 Insurance for Contractor's Personnel**

The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

The insurance shall cover the Employer and the Engineer against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

## 19. Force Majeure

### 19.1 Definition of Force Majeure

In this Clause, "Force Majeure" means an exceptional event or circumstance:

- (a) which is beyond a Party's control,
- (b) which such Party could not reasonably have provided against before entering into the Contract,
- (c) which, having arisen, such Party could not reasonably have avoided or overcome, and
- (d) which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
- (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
- (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

### 19.2 Notice of Force Majeure

If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.

The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.

Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.

**19.3 Duty to Minimise Delay**

Each Party shall at all times use all reasonable endeavours to minimise any delay in the performance of the Contract as a result of Force Majeure.

A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

**19.4 Consequences of Force Majeure**

If the Contractor is prevented from performing its substantial obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (iv) of Sub-Clause 19.1 [Definition of Force Majeure] and, in the case of sub-paragraphs (ii) to (iv), occurs in the Country, payment of any such Cost, including the costs of rectifying or replacing the Works and/or Goods damaged or destructed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment].

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

**19.5 Force Majeure Affecting Subcontractor**

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.



**19.6 Optional  
Termination,  
Payment and  
Release**

If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment].

Upon such termination, the Engineer shall determine the value of the work done and issue a Payment Certificate which shall include:

- (a) the amounts payable for any work carried out for which a price is stated in the Contract;
- (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal;
- (c) other Costs or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works;
- (d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and
- (e) the Cost of repatriation of the Contractor's staff and labour employed wholly in connection with the Works at the date of termination.

**19.7 Release from  
Performance**

Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further

performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance:

- (a) the Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and
- (b) the sum payable by the Employer to the Contractor shall be the same as would have been payable under Sub-Clause 19.6 [Optional Termination, Payment and Release] if the Contract had been terminated under Sub-Clause 19.6.

## **20. Claims, Disputes and Arbitration**

### **20.1 Contractor's Claims**

If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance.

If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Engineer. Without admitting the Employer's liability, the Engineer may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records.

The Contractor shall permit the Engineer to inspect all these records, and shall (if instructed) submit copies to the Engineer.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this fully detailed claim shall be considered as interim;
- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer may reasonably require; and
- (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer.

Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within the above defined time period.

Within the above defined period of 42 days, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

Each Payment Certificate shall include such additional payment for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate

the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

If the Engineer does not respond within the timeframe defined in this Clause, either Party may consider that the claim is rejected by the Engineer and any of the Parties may refer it to the Dispute Board in accordance with Sub-Clause 20.4 [Obtaining Dispute Board's Decision].

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

**20.2 Appointment of  
the Dispute  
Board**

Disputes shall be referred to a DB for decision in accordance with Sub-Clause 20.4 [Obtaining Dispute Board's Decision]. The Parties shall appoint a DB by the date stated in the Contract Data.

The DB shall comprise, as stated in the Contract Data, either one or three suitably qualified persons ("the members"), each of whom shall be fluent in the language for communication defined in the Contract and shall be a professional experienced in the type of construction involved in the Works and with the interpretation of contractual documents. If the number is not so stated and the Parties do not agree otherwise, the DB shall comprise three persons.

If the Parties have not jointly appointed the DB 21 days before the date stated in the Contract Data and the DB is to comprise three persons, each Party shall nominate one member for the approval of the other Party. The first two members shall recommend and the Parties shall agree upon the third member, who shall act as chairman.

However, if a list of potential members has been agreed by the Parties and is included in the Contract, the members shall be selected from those on the list, other than anyone who is unable or unwilling to accept appointment to the DB.

The agreement between the Parties and either the sole member or each of the three members shall incorporate by reference the General Conditions of Dispute Board Agreement contained in the Appendix to these General Conditions, with such amendments as are agreed between them.

The terms of the remuneration of either the sole member or each of the three members, including the remuneration of any expert whom the DB consults, shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

If at any time the Parties so agree, they may jointly refer a matter to the DB for it to give its opinion. Neither Party shall consult the DB on any matter without the agreement of the other Party.

If a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, a replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agreed upon, as described in this Sub-Clause.

The appointment of any member may be terminated by mutual agreement of both Parties, but not by the Employer or the Contractor acting alone. Unless otherwise agreed by both Parties, the appointment of the DB (including each member) shall expire when the discharge referred to in Sub-Clause 14.12 [Discharge] shall have become effective.

**20.3 Failure to Agree  
on the  
Composition of  
the Dispute  
Board**

If any of the following conditions apply, namely:

- (a) the Parties fail to agree upon the appointment of the sole member of the DB by the date stated in the first paragraph of Sub-Clause 20.2, [Appointment of the Dispute Board],
- (b) either Party fails to nominate a member (for approval by the other Party), or fails to approve a member nominated by the other Party, of a DB of three persons by such date,

- (c) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the DB by such date, or
- (d) the Parties fail to agree upon the appointment of a replacement person within 42 days after the date on which the sole member or one of the three members declines to act or is unable to act as a result of death, disability, resignation or termination of appointment,

then the appointing entity or official named in the Contract Data shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the DB. This appointment shall be final and conclusive. Each Party shall be responsible for paying one-half of the remuneration of the appointing entity or official.

**20.4 Obtaining  
Dispute Board's  
Decision**

If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Engineer, either Party may refer the dispute in writing to the DB for its decision, with copies to the other Party and the Engineer. Such reference shall state that it is given under this Sub-Clause.

For a DB of three persons, the DB shall be deemed to have received such reference on the date when it is received by the chairman of the DB.

Both Parties shall promptly make available to the DB all such additional information, further access to the Site, and appropriate facilities, as the DB may require for the purposes of making a decision on such dispute. The DB shall be deemed to be not acting as arbitrator(s).

Within 84 days after receiving such reference, or within such other period as may be proposed by the DB and approved by both Parties, the DB shall give its decision, which shall be reasoned and shall state that it is given under this Sub-Clause. The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award as described below. Unless the Contract has already been abandoned, repudiated or terminated, the Contractor shall continue to proceed with the Works in accordance with the Contract.

If either Party is dissatisfied with the DB's decision, then either Party may, within 28 days after receiving the decision, give notice to the other Party of its dissatisfaction and intention to commence arbitration. If the DB fails to give its decision within the period of 84 days (or as otherwise approved) after receiving such reference, then either Party may, within 28 days after this period has expired, give notice to the other Party of its dissatisfaction and intention to commence arbitration.

In either event, this notice of dissatisfaction shall state that it is given under this Sub-Clause, and shall set out the matter in dispute and the reason(s) for dissatisfaction. Except as stated in Sub-Clause 20.7 [Failure to Comply with Dispute Board's Decision] and Sub-Clause 20.8 [Expiry of Dispute Board's Appointment], neither Party shall be entitled to commence arbitration of a dispute unless a notice of dissatisfaction has been given in accordance with this Sub-Clause.

If the DB has given its decision as to a matter in dispute to both Parties, and no notice of dissatisfaction has been given by either Party within 28 days after it received the DB's decision, then the decision shall become final and binding upon both Parties.

**20.5 Amicable  
Settlement**

Where notice of dissatisfaction has been given under Sub-Clause 20.4 above, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, arbitration may be commenced on or after the fifty-sixth day after the day on which a notice of dissatisfaction and intention to commence arbitration was given, even if no attempt at amicable settlement has been made.

**20.6 Arbitration**

Unless indicated otherwise in the Particular Conditions, any dispute not settled amicably and in respect of which the DB's decision (if any) has not become final and binding shall be finally settled by arbitration. Unless otherwise agreed by both Parties:

- (a) For contracts with foreign contractors, international arbitration with proceedings administered by the international arbitration institution appointed in the Contract Data, conducted in accordance with the rules of arbitration of the appointed institution, if any, or in accordance with UNCITRAL arbitration rules,

at the choice of the appointed institution,

- (b) the place of arbitration shall be the city where the headquarters of the appointed arbitration institution is located,
- (c) the arbitration shall be conducted in the language for communications defined in Sub-Clause 1.4 [Law and Language], and
- (d) For contracts with domestic contractors, arbitration with proceedings conducted in accordance with the laws of the Employer's country.

The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer, and any decision of the DB, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Engineer from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.

Neither Party shall be limited in the proceedings before the arbitrators to the evidence or arguments previously put before the DB to obtain its decision, or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the DB shall be admissible in evidence in the arbitration.

Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, the Engineer and the DB shall not be altered by reason of any arbitration being conducted during the progress of the Works.

**20.7 Failure to  
Comply with  
Dispute Board's  
Decision**

In the event that a Party fails to comply with a final and binding DB decision, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under Sub-Clause 20.6 [Arbitration]. Sub-Clause 20.4 [Obtaining Dispute Board's Decision] and Sub-Clause 20.5 [Amicable Settlement] shall not apply to this reference.

**20.8 Expiry of  
Dispute Board's  
Appointment**

If a dispute arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works and there is no DB in place, whether by reason of the expiry of the DB's appointment or otherwise:



- (a) Sub-Clause 20.4 [Obtaining Dispute Board's Decision] and Sub-Clause 20.5 [Amicable Settlement] shall not apply, and
- (b) the dispute may be referred directly to arbitration under Sub-Clause 20.6 [Arbitration].

## APPENDIX

### A General Conditions of Dispute Board Agreement

#### 1. Definitions

Each "Dispute Board Agreement" is a tripartite agreement by and between:

- (a) the "Employer";
- (b) the "Contractor"; and
- (c) the "Member" who is defined in the Dispute Board Agreement as being:
  - (i) the sole member of the "DB" and, where this is the case, all references to the "Other Members" do not apply, or
  - (ii) one of the three persons who are jointly called the "DB" (or "Dispute Board") and, where this is the case, the other two persons are called the "Other Members."

The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Board Agreement, which incorporates this Appendix. In the Dispute Board Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.

#### 2. General Provisions

Unless otherwise stated in the Dispute Board Agreement, it shall take effect on the latest of the following dates:

- (a) the Commencement Date defined in the Contract,
- (b) when the Employer, the Contractor and the Member have each signed the Dispute Board Agreement, or
- (c) when the Employer, the Contractor and each of the Other Members (if any) have respectively each signed a dispute board agreement.

This employment of the Member is a personal appointment. At any time, the Member may give not less than 70 days' notice of resignation to the Employer and to the Contractor, and the Dispute Agreement shall terminate upon the expiry of this period.

**3. Warranties**

The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Engineer. The Member shall promptly disclose, to each of them and to the Other Members (if any), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.

When appointing the Member, the Employer and the Contractor relied upon the Member's representations that he/she is:

- (a) experienced in the work which the Contractor is to carry out under the Contract,
- (b) experienced in the interpretation of contract documentation, and
- (c) fluent in the language for communications defined in the Contract.

**4. General  
Obligations of  
the Member**

The Member shall:

- (a) have no interest financial or otherwise in the Employer, the Contractor or Engineer, nor any financial interest in the Contract except for payment under the Dispute Board Agreement;
- (b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Board Agreement;
- (c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Board Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Engineer, and any previous involvement in the overall project of which the Contract forms part;
- (d) not, for the duration of the Dispute Board Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except as may be agreed in writing by the Employer, the Contractor and the Other Members (if any);
- (e) comply with the annexed procedural rules and with Sub-Clause 20.4 of the Conditions of Contract;

- (f) not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;
- (g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor or the Engineer regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Board Agreement;
- (h) ensure his/her availability for all site visits and hearings as are necessary;
- (i) become conversant with the Contract and with the progress of the Works (and of any other parts of the project of which the Contract forms part) by studying all documents received which shall be maintained in a current working file;
- (j) treat the details of the Contract and all the DB's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor and the Other Members (if any); and
- (k) be available to give advice and opinions, on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members (if any).

**5. General  
Obligations of  
the Employer  
and the  
Contractor**

The Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DB's activities under the Contract and the Dispute Board Agreement. The Employer and the Contractor shall be responsible for compliance with this provision, by the Employer's Personnel and the Contractor's Personnel respectively.

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any):

- (a) be appointed as an arbitrator in any arbitration under the Contract;

- (b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or
- (c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he is relieved from liability under the preceding paragraph.

Whenever the Employer or the Contractor refers a dispute to the DB under Sub-Clause 20.4 of the Conditions of Contract, which will require the Member to make a site visit and attend a hearing, the Employer or the Contractor shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payments due or paid to the Member.

## 6. Payment

The Member shall be paid as follows, in the currency named in the Dispute Board Agreement:

- (a) a retainer fee per calendar month, which shall be considered as payment in full for:
  - (i) being available on 28 days' notice for all site visits and hearings;
  - (ii) becoming and remaining conversant with all project developments and maintaining relevant files;
  - (iii) all office and overhead expenses including secretarial services, photocopying and office supplies incurred in connection with his duties; and
  - (iv) all services performed hereunder except those referred to in sub-paragraphs (b) and (c) of this Clause.

The retainer fee shall be paid with effect from the last day of the calendar month in which the Dispute Board Agreement becomes effective; until the last day of the calendar month in which the Taking-Over Certificate is issued for the whole of the Works.

With effect from the first day of the calendar month following the month in which the Taking-Over Certificate is issued for the whole of the Works, the retainer fee shall be reduced by one third. This reduced fee shall be paid until the first day of the calendar month in which the Member resigns or the Dispute Board Agreement is otherwise terminated.

- (b) a daily fee which shall be considered as payment in full for:
  - (i) each day or part of a day up to a maximum of two days' travel time in each direction for the journey between the Member's home and the site, or another location of a meeting with the Other Members (if any);
  - (ii) each working day on Site visits, hearings or preparing decisions; and
  - (iii) each day spent reading submissions in preparation for a hearing.
- (c) all reasonable expenses including necessary travel expenses (air fare in less than first class, hotel and subsistence and other direct travel expenses) incurred in connection with the Member's duties, as well as the cost of telephone calls, courier charges, faxes and telexes: a receipt shall be required for each item in excess of five percent of the daily fee referred to in sub-paragraph (b) of this Clause;
- (d) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

The retainer and daily fees shall be as specified in the Dispute Board Agreement. Unless it specifies otherwise, these fees shall remain fixed for the first 24 calendar months, and shall thereafter be adjusted by agreement between the Employer, the Contractor and the Member, at each anniversary of the date on which the Dispute Board Agreement became effective.

If the parties fail to agree on the retainer fee or the daily fee, the appointing entity or official named in the Contract Data shall determine the amount of the fees to be used.

The Member shall submit invoices for payment of the monthly retainer and air fares quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a site visit or hearing. All invoices shall be accompanied by a brief description of activities performed

during the relevant period and shall be addressed to the Contractor.

The Contractor shall pay each of the Member's invoices in full within 56 calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Board Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the DB; and without prejudice to the Employer's rights or remedies. In addition to all other rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in Sub-Clause 14.8 of the Conditions of Contract.

If the Member does not receive payment of the amount due within 70 days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice under Clause 7.

## **7. Termination**

At any time: (i) the Employer and the Contractor may jointly terminate the Dispute Board Agreement by giving 42 days' notice to the Member; or (ii) the Member may resign as provided for in Clause 2.

If the Member fails to comply with the Dispute Board Agreement, the Employer and the Contractor may, without prejudice to their other rights, terminate it by notice to the Member. The notice shall take effect when received by the Member.

If the Employer or the Contractor fails to comply with the Dispute Board Agreement, the Member may, without prejudice to his other rights, terminate it by notice to the Employer and the Contractor. The notice shall take effect when received by them both.

Any such notice, resignation and termination shall be final and binding on the Employer, the Contractor and the Member. However, a notice by the Employer or the Contractor, but not by both, shall be of no effect.

**8. Default of the Member**

If the Member fails to comply with any of his obligations under Clause 4 (a) - (d) above, he shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members (if any), for proceedings or decisions (if any) of the DB which are rendered void or ineffective by the said failure to comply.

If the Member fails to comply with any of his obligations under Clause 4 (e) - (k) above, he shall not be entitled to any fees or expenses hereunder from the date and to the extent of the non-compliance and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses already received by the Member, for proceedings or decisions (if any) of the DB which are rendered void or ineffective by the said failure to comply.

**9. Disputes**

Any dispute or claim arising out of or in connection with this Dispute Board Agreement, or the breach, termination or invalidity thereof, shall be finally settled by institutional arbitration. If no other arbitration institute is agreed, the arbitration shall be conducted under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with these Rules of Arbitration.



## PROCEDURAL RULES

Unless otherwise agreed by the Employer and the Contractor, the DB shall visit the site at intervals of not more than 140 days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor and the DB, the period between consecutive visits shall not be less than 70 days, except as required to convene a hearing as described below.

The timing of and agenda for each site visit shall be as agreed jointly by the DB, the Employer and the Contractor, or in the absence of agreement, shall be decided by the DB. The purpose of site visits is to enable the DB to become and remain acquainted with the progress of the Works and of any actual or potential problems or claims, and, as far as reasonable, to endeavour to prevent potential problems or claims from becoming disputes.

Site visits shall be attended by the Employer, the Contractor and the Engineer and shall be co-ordinated by the Employer in co-operation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each site visit and before leaving the site, the DB shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.

The Employer and the Contractor shall furnish to the DB one copy of all documents which the DB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the performance of the Contract. All communications between the DB and the Employer or the Contractor shall be copied to the other Party. If the DB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.

If any dispute is referred to the DB in accordance with Sub-Clause 20.4 of the Conditions of Contract, the DB shall proceed in accordance with Sub-Clause 20.4 and these Rules. Subject to the time allowed to give notice of a decision and other relevant factors, the DB shall:

- (a) act fairly and impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his case and responding to the other's case, and
- (b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.

The DB may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.

Except as otherwise agreed in writing by the Employer and the Contractor, the DB shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Engineer, and to proceed in the absence of any party who the DB is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.

The Employer and the Contractor empower the DB, among other things, to:

- (a) establish the procedure to be applied in deciding a dispute,
- (b) decide upon the DB's own jurisdiction, and as to the scope of any dispute referred to it,
- (c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Rules,
- (d) take the initiative in ascertaining the facts and matters required for a decision,
- (e) make use of its own specialist knowledge, if any,
- (f) decide upon the payment of financing charges in accordance with the Contract,
- (g) decide upon any provisional relief such as interim or conservatory measures, and
- (h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute.

The DB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DB shall make and give its decision in accordance with Sub-Clause 20.4, or as otherwise agreed by the Employer and the Contractor in writing. If the DB comprises three persons:

- (a) it shall convene in private after a hearing, in order to have discussions and prepare its decision;
- (b) it shall endeavour to reach a unanimous decision: if this proves impossible the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and
- (c) if a Member fails to attend a meeting or hearing, or to fulfil any required function, the other two Members may nevertheless proceed to make a decision, unless:
  - (i) either the Employer or the Contractor does not agree that they do so, or
  - (ii) the absent Member is the chairman and he/she instructs the other Members not to make a decision.

**PARTICULAR CONDITIONS**

## **Section VIII. Particular Conditions (PC)**

The following Particular Conditions shall supplement the GC. Whenever there is a conflict, the provisions herein shall prevail over those in the GC.

**Part A - Contract Data**

| Conditions   | Sub-Clause        | Data   |
|--|-------------------|--|
| Employer's name and address                                | 1.1.2.2 & 1.3     | Ministry of Works<br>Belmopan  |
| Engineer's name and address                                | 1.1.2.4 & 1.3     | Errol Gentle, Chief Executive Officer,<br>Ministry of Works  |
| Fund's name  | 1.1.2.11          | OFID (OPEC Fund for International<br>Development)  |
| Name of the Recipient of OFID<br>Financing                 | 1.1.2.12          | The Government of Belize   |
| Time for Completion  | 1.1.3.3           | 30 months  |
| Defects Notification Period                                | 1.1.3.7           | 540 days.  |
| Sections   | 1.1.5.6           | N/A  |
| Electronic transmission systems                            | 1.3               | Fax and E-mail   |
| Governing Law  | 1.4               | Belize Law   |
| Ruling language  | 1.4               | English  |
| Language for communications                                | 1.4               | English  |
| Time for the Parties entering<br>into a Contract Agreement | 1.6               | 28 Days  |
| Time for access to the Site                                | 2.1               | Seven (7) days after the<br>Commencement Date  |
| Engineer's Duties and<br>Authority                         | 3.1(b)(ii)        | Variations resulting in an increase of the<br>Accepted Contract Amount in excess of<br><u>1</u> % shall require approval of the<br>Employer.   |
| Performance Security                                       | 4.2               | The performance security will be in<br>the form of a Demand Guarantee in the<br>amount of Ten Percent (10%) of the<br>Accepted Contract Amount and in the<br>same currency of the Accepted<br>Contract Amount. |
| Normal working hours                                       | 6.5               | 7:00 - 12:00pm & 1:00 - 5:00pm week<br>days  |
| Delay damages for the Works                                | 8.7 &<br>14.15(b) | <u>0.0001</u> % of the Contract Price per day.   |

| Conditions  | Sub-Clause   | Data  |
|---|--------------|---|
| Maximum amount of delay damages   | 8.7          | <u>5%</u> of the final Contract Price.  |
| Provisional Sums  | 13.5.(b)(ii) | <u>13.5%</u>  |
| Adjustments for Changes in Cost   | 13.8         | See Table 1   |
| Taxes and Duties  | 14.1(b)      | Notwithstanding Clause 14.1(b) of the General Conditions, Contractors are exempt from all duties, taxes and other levies.   |
| Total advance payment   | 14.2         | <u>10%</u> Percentage of the Accepted Contract Amount payable in the currencies and proportions in which the Accepted Contract Amount is payable: One payment after receipt of Advance Payment Guarantee. |
| Repayment amortization rate of advance payment  | 14.2(b)      | <u>10%</u>  |
| Percentage of Retention   | 14.3         | <u>10%</u>  |
| Limit of Retention Money  | 14.3         | <u>5%</u> of the Accepted Contract Amount   |
| Plant and Materials   | 14.5(b)(i)   | If Sub-Clause 14.5 applies: Plant and Materials for payment Free on Board: <u>N/A</u> .   |
|   | 14.5(c)(i)   | Plant and Materials for payment when delivered to the Site.   |
| Minimum Amount of Interim Payment Certificates  | 14.6         | <u>2%</u> of the Accepted Contract Amount.  |
| Publishing source of commercial interest rates for financial charges in case of delayed payment | 14.8         | Central Bank of Belize  |
| Maximum total liability of the Contractor to the Employer                                       | 17.6         | The product of <u>1.1 times Contract Amount less Provisional and Contingency Sum</u> of the Accepted Contract Amount.   |
| Periods for submission of insurance:  | 18.1         | a. evidence of insurance.   |
|   |              | b. relevant policies  |
|   |              | <u>28</u> days  |
|   |              | <u>49</u> days  |

| Conditions  | Sub-Clause | Data  |
|---|------------|---|
| Maximum amount of deductibles for insurance of the Employer's risks | 18.2(d)    | N/A   |
| Minimum amount of third party insurance                             | 18.3       | Bz.\$5,000,000.00 unlimited number of occurrences |
| Date by which the DB shall be appointed                             | 20.2       | 28 days after the Commencement date               |
| The DB shall be comprised of  | 20.2       | One sole Member                                   |
| List of potential DB sole members                                   | 20.2       | To be determined                                  |
| Appointment (if not agreed) to be made by                           | 20.3       | Belize Chamber of Commerce & Industry             |
| Rules of arbitration  | 20.6(a)    | The International Chamber of Commerce             |

Table 1

| Materials   | Unit | Price 30 days before bid submission | Source |
|-------------|------|-------------------------------------|--------|
| Steel Rebar |      |                                     |        |
| Petrol      |      |                                     |        |
| Diesel      |      |                                     |        |
| Cement      |      |                                     |        |

Table: Summary of Sections

| Section Name/Description (Sub-Clause 1.1.5.6) | Time for Completion (Sub-Clause 1.1.3.3) | Damages for Delay (Sub-Clause 8.7) |
|---|--|------------------------------------|
|   |  |                                    |
|   |  |                                    |
|   |  |                                    |
|   |  |                                    |
|   |  |                                    |

**Part B - Specific Provisions**

**Sub-Clause 14.1**

**The Contract Price**

*(Alternative paragraph)*

(e) Notwithstanding the provisions of subparagraph (b), Contractor's Equipment, including essential spare parts therefore, imported by the Contractor for the sole purpose of executing the Contract shall be temporarily exempt from the payment of import duties and taxes upon initial importation, provided the Contractor shall post with the customs authorities at the port of entry an approved export bond or bank guarantee, valid until the Time for Completion plus six months, in an amount equal to the full import duties and taxes which would be payable on the assessed imported value of such Contractor's Equipment and spare parts, and callable in the event the Contractor's Equipment is not exported from the Country on completion of the Contract. A copy of the bond or bank guarantee endorsed by the customs authorities shall be provided by the Contractor to the Employer upon the importation of individual items of Contractor's Equipment and spare parts. Upon export of individual items of Contractor's Equipment or spare parts, or upon the completion of the Contract, the Contractor shall prepare, for approval by the customs authorities, an assessment of the residual value of the Contractor's Equipment and spare part to be exported, based on the depreciation scale(s) and other criteria used by the customs authorities for such purposes under the provisions of the applicable Laws. Import duties and taxes shall be due and payable to the customs authorities by the Contractor on (a) the difference between the initial imported value and the residual value of the Contractor's Equipment and spare parts to be exported; and (b) on the initial imported value that Contractor's Equipment and spare parts remaining in the Country after completion of the Contract. Upon payment of such dues within 28 days



of being invoiced, the bond or bank guarantee shall be reduced or released accordingly; otherwise the security shall be called in the full amount remaining.

Sub-Clause 6.23

Workers' Organizations

*(additional sub-clause to be added after Sub-Clause 6.22)*

In countries where national law recognizes workers' rights to form and to join workers' organizations of their choosing without interference and to bargain collectively, the Contractor shall comply with national law. Where national law substantially restricts workers' organizations, the Contractor shall enable alternative means for Contractor's Personnel to express their grievances and protect their rights regarding working conditions and terms of employment. In either case described above, and where national law is silent, the Contractor shall not discourage workers from forming or joining workers' organizations of their choosing or from bargaining collectively, and will not discriminate or retaliate against Contractor's Personnel who participate, or seek to participate, in such organizations and bargain collectively. The Contractor shall engage with such workers representatives. Worker organizations are expected to fairly represent the workers in the workforce.

Sub-Clause 6.24

Non-Discrimination and  
Equal Opportunity

*(additional sub-clause to be added after Sub-Clause 6.23 above)*

The Contractor shall not make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment relationship on the principle of equal opportunity and fair treatment, and will not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and discipline. In countries where national law provides for nondiscrimination in employment, the Contractor shall comply with national law. When national laws are silent on nondiscrimination in employment, the Contractor shall meet this Sub-Clause's requirements. Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on inherent requirements of the job will not be deemed discrimination.



# SECURITY FORMS

# Performance Security

## Option 1: (Demand Guarantee)

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

Beneficiary: \_\_\_\_\_ [Name and Address of Employer]

Date: \_\_\_\_\_

PERFORMANCE GUARANTEE No.: \_\_\_\_\_

We have been informed that \_\_\_\_\_ [name of Contractor] (hereinafter called "the Contractor") has entered into Contract No. \_\_\_\_\_ [reference number of the contract] dated \_\_\_\_\_ with you, for the execution of \_\_\_\_\_ [name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Contractor, we \_\_\_\_\_ [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of \_\_\_\_\_ [amount in figures] ( \_\_\_\_\_ ) [amount in words],<sup>1</sup> such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the .... Day of ....., 2...<sup>2</sup>, and any demand for payment under it must be received by us at this office on or before that date.

<sup>1</sup> The Guarantor shall insert an amount representing the percentage of the Contract Price specified in the Contract and denominated either in the currency(cies) of the Contract or a freely convertible currency acceptable to the Employer.

<sup>2</sup> Insert the date twenty-eight days after the expected completion date. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded.

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*[signature(s)]*

*Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.*

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*Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."*

## Option 2: Performance Bond

By this Bond \_\_\_\_\_ as Principal (hereinafter called "the Contractor") and \_\_\_\_\_] as Surety (hereinafter called "the Surety"), are held and firmly bound unto \_\_\_\_\_] as Obligee (hereinafter called "the Employer") in the amount of \_\_\_\_\_, for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Contractor has entered into a written Agreement with the Employer dated the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_, for \_\_\_\_\_ in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Employer to be, in default under the Contract, the Employer having performed the Employer's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a Bid or bids from qualified Bidders for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by the Employer and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Employer and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Employer to Contractor under the Contract, less the amount properly paid by Employer to Contractor; or
- (3) pay the Employer the amount required by Employer to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Employer named herein or the heirs, executors, administrators, successors, and assigns of the Employer.

In testimony whereof, the Contractor has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_.

SIGNED ON \_\_\_\_\_ on behalf of \_\_\_\_\_

By \_\_\_\_\_ in the capacity of \_\_\_\_\_

In the presence of \_\_\_\_\_

SIGNED ON \_\_\_\_\_ on behalf of \_\_\_\_\_

By \_\_\_\_\_ in the capacity of \_\_\_\_\_

In the presence of \_\_\_\_\_

# Advance Payment Security

## Demand Guarantee

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

**Beneficiary:** \_\_\_\_\_ [Name and Address of Employer]

**Date:** \_\_\_\_\_

**ADVANCE PAYMENT GUARANTEE No.:** \_\_\_\_\_

We have been informed that \_\_\_\_\_ [name of Contractor] (hereinafter called "the Contractor") has entered into Contract No. \_\_\_\_\_ [reference number of the contract] dated \_\_\_\_\_ with you, for the execution of \_\_\_\_\_ [name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum \_\_\_\_\_ [amount in figures] (\_\_\_\_\_) [amount in words] is to be made against an advance payment guarantee.

At the request of the Contractor, we \_\_\_\_\_ [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of \_\_\_\_\_ [amount in figures] (\_\_\_\_\_) [amount in words]<sup>1</sup> upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number \_\_\_\_\_ at \_\_\_\_\_ [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 \_\_\_ day of \_\_\_\_\_,

<sup>1</sup> The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer.

2\_\_\_\_,<sup>2</sup> whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date..

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

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*[signature(s)]*

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



# Retention Money Security

## Demand Guarantee

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

Beneficiary: \_\_\_\_\_ [Name and Address of Employer]

Date: \_\_\_\_\_

RETENTION MONEY GUARANTEE No.: \_\_\_\_\_

We have been informed that \_\_\_\_\_ [name of Contractor] (hereinafter called "the Contractor") has entered into Contract No. \_\_\_\_\_ [reference number of the contract] dated \_\_\_\_\_ with you, for the execution of \_\_\_\_\_ [name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment, payment of [insert the second half of the Retention Money or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security] is to be made against a Retention Money guarantee.

At the request of the Contractor, we \_\_\_\_\_ [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of \_\_\_\_\_ [amount in figures] (\_\_\_\_\_) [amount in words]' upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

It is a condition for any claim and payment under this guarantee to be made that the payment of the second half of the Retention Money referred to above must have been received by the

<sup>1</sup> The Guarantor shall insert an amount representing the amount of the second half of the Retention Money or or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security and denominated either in the currency(ies) of the second half of the Retention Money as specified in the Contract, or in a freely convertible currency acceptable to the Employer.

Contractor on its account number \_\_\_\_\_ at \_\_\_\_\_ *[name and address of Bank]*.

This guarantee shall expire, at the latest, 21 days after the date when the Employer has received a copy of the Performance Certificate issued by the Engineer. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

\_\_\_\_\_  
*[signature(s)]*

*Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.*



## ATTORNEY GENERAL'S MINISTRY

Tel: (501) 822-2504/822-0519 Fax: (501) 822-3390  
Belmopan, Belize, Central America

### MEMORANDUM

**Ref:** LEM/3/01/19 (40)  
**To:** CHIEF EXECUTIVE OFFICER, MINISTRY OF WORKS  
**From:** SOLICITOR GENERAL, ATTORNEY GENERAL'S MINISTRY  
**Date:** 22<sup>ND</sup> OCTOBER, 2019

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**Subject:** UPGRADING OF CARACOL ROAD PROJECT- CONTRACT 1A AND  
CONTRACT 1B PROCUREMENT OF CONTRACTORS- POST  
QUALIFICATION

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We write in relation to captioned matter.

Please be advised that the Chambers of the Attorney General has thoroughly perused the captioned contracts, and notes that there is no Letter of Acceptance attached to Contract 1A and 1B.

Further, is noted that A & N Constructions for Contract 1B is registered as a business name only. As the entity is only a business name, it does not have legal capacity to enter into this contract, and the owner of the business would need be inserted doing business as A & N Constructions.

If you have any questions or require any clarification, please do not hesitate to contact this Office.

Regards,

ELISA MONTALVO  
SOLICITOR GENERAL