

Contract #206-2019/20



GOVERNMENT OF BELIZE
MINISTRY OF WORKS
BELMOPAN

CARACOL ROAD UPGRADING PROJECT

LOT 1B

TRIPARTITE JUNCTION TO BLANCANEUX
LODGE LINE

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 2nd day of **DECEMBER 2019** between the Ministry of Works, Power Lane, Belmopan (hereinafter “the Employer”), of the one part, and A & N Constructions Ltd., Spanish Lookout, Cayo District, BELIZE (hereinafter “the Contractor”), of the other part.

WHEREAS the Employer desires that the Works known as Caracol Road Upgrading Project - Lot 1B (Tripartite Junction to Blancaneaux Lodge Line) 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.

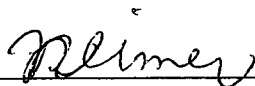
The Employer and the Contractor agree as follows:

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\$13,992,917.15** (Thirteen Million Nine Hundred Ninety-Two Thousand Nine Hundred Seventeen Dollars and Fifteen 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:

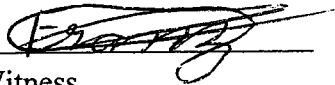
Signed by:



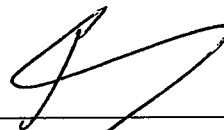
NORMAN REIMER
A & N Constructions Ltd.

For and on behalf of the
Contractor

A & N Construction

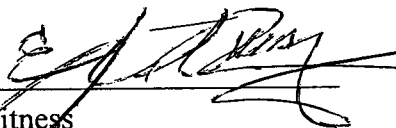
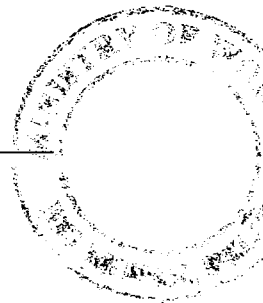


Witness



HON. RENE MONTERO
Minister of Works

For and on behalf of the
Employer



Witness
Erról Gentle
Chief Executive Officer
Ministry of Works

- ✓ Teichroeb & Sons: Lot 1 Contract 1A, Bill No. 8 Day Works, Contractor did not price this bill at all. Consultant prices prevails Add (+ 286,731.00)

Total addition and omission Bz\$ (+673,631.00) without adding the contingency.

The new contractor price after the contingency is Bz\$ (46,581,999.86)

Lot 1 Contract 1A, Summery Sheet for all the five contractors + Consultant estimated prices are all attached in "Annexures 10"

13. ARITHMETIC CHECK FOR BILL OF QUANTITIES FOR LOT 1B

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 4 contractors are all shown in **Annexure 9**. Contractors mistake are shown below, and they are highlighted in yellow in the bill of quantities.

- ✓ A&N Construction: Lot 1 Contract 1B, item No. 1.3(b), The Contractor inserted the number of cars as 1. The bill specify 2 cars Add (+85,000.00)
- ✓ A&N Construction: Lot 1 Contract 1B, Bill No. 8.3 Dayworks, the contractor adds from 8.3.1 to 8.3.43 wrongly. His results is 20,561.50, it should be 62,754.30 Add (+42,192.80)
- ✓ A&N Construction: Lot 1 Contract 1B, Bill No. 5, Item No. 5.5 First Coat Seal, the contractor made mathematical error in the rate multiplication Omit (-248,187.50)
- ✓ A&N Construction: Lot 1 Contract 1B, Summery Sheet. The contractor did not add for Bill no. 7 Construction of Little Vaqueros Bridge Add (+406,445.90)

Total addition and omission Bz\$ (+285,451.20) without adding the contingency.

The new contractor price after the contingency is Bz\$ (13,992,917.15)

- ✓ Belize Roadway Construction: Lot 1 Contract 1B, item No. 1.3(b), The Contractor inserted the number of cars as 1. The bill specify 2 cars Add (+90,000.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1B, Bill No. 4, item 4.4. The Consultant Provisional Sum for this item is 25,000.00. the contractor inserted the amount of 50,000.00. Omit (-25,000.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1B, Bill No. 6, item 6.8 (a). Concrete Slab. The consultant estimates 2 no. the contractor inserted 3 no. Omit (-5,200.00)
- ✓ Belize Roadway Construction: Lot 1 Contract 1B, Summery Sheet. The contractor did not add for Bill no. 7 Construction of Little Vaqueros Bridge Add (+376,300.50)

Total addition and omission Bz\$ (+436,100.50) without adding the contingency.

The new contractor price after the contingency is Bz\$ (14,422,146.48)

LETTER OF ACCEPTANCE

BELIZE



Ministry of Works

Please Quote

No: PEU/UCRP/GEN/19 (66)

16th October, 2019

A & N Construction

Route 20 East

Spanish Lookout

CAYO DISTRICT

Phone No: 610 - 1657

Fax: 823 - 0016

E-mail: constructionan@yahoo.com

Dear Mr. Reimer:


SUBJECT: UPGRADING OF CARACOL ROAD PROJECT

LOT 1B - TRIPARTITE JUNCTION - BLANCANEUX LODGE LINE

The Ministry is pleased to inform you that your Financial Offer submitted in connection with the Upgrading of Caracol Road Project Lot 1 B - Tripartite Junction - Blancaneux Lodge Line was accepted for the amount of **Bz\$13,992,917.15.**

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

Bid Submission Sheet

Date: 17th June 2019

ICB No.: *Caracol Road Upgrading Project Lot 1 Contract 1B*

Invitation for Bid No.: n/a

To: Edgar E. Puga
Project Execution Unit
Ministry of Works
Power Lane
Belmopan, Cayo, Belize, C. A.

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: *Revised Drawings and Bill of Quantities*;
- (b) We offer to execute in conformity with the Bidding Document the Following Works: *Caracol Road Upgrading Project Contract 1 Lot 1B*;
- (c) The total price of our Bid, excluding any discounts offered in item (d) below, is: *[Thirteen million, six hundred seventy-eight thousand, nine hundred twenty Belize dollars and eighty-three cents (BZ\$13,678,920.83)]*;
- (d) The discounts offered and the methodology for their application are: *[None]*
- (e) Our bid shall be valid for the period of time specified in ITB Sub-Clause 18.1 *ninety (90) days*, from the date fixed for the bid submission deadline in accordance with the Bidding Document ITB Sub-Clause 22.1, 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 nationality 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 Sub-Clause 4.3;
- (i) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.3, other than alternative offers submitted in accordance with ITB 13;
- (j) We, including any of our subcontractors or suppliers for any part of the contract, have not been declared ineligible by the Fund, under the Employer's country laws or official regulations or by an act of compliance with the decision of the United Nations Security Council;

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(k) We, are not a government 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
None	None	None	None

(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.; and

(n) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

(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 Norman Reimer In capacity of General Manager

Signed *Reimer*

Duly authorized to sign for and on behalf of A&N Constructions

Dated on Seventeenth day of June 2019



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Priced Bill of Quantities

CARACOL ROAD UPGRADE PROJECT		
LOT 1, CONTRACT 1B (Tripartite Junction - Blancaneaux Lodge Line)		
Bill of Quantities		
Bill No. 9 SUMMARY		
Item	Description	Amount (BZ\$)
1	Preliminary & General	1,439,500.00
2	Earthworks	3,885,300.00
3	Quarry Development & Operation	30,000.00
4	Drainage	1,288,355.10
5	Pavements and Surfacing	4,945,012.50
6	Road Markings, Furniture & Miscellaneous Work	765,046.98
7	Construction of Little Vaqueros Bridge	406,445.90
	Sub-Total	12,353,214.58
8	Dayworks	82,167.99
	TOTAL BILL AMOUNTS	12,435,382.57
	Adjustment Amount (refer 7.1.11 of Preamble to Bills)	
	Contingency Sum 10% of Total Bill Amounts for Contract 1B (to be included in Grand Total)	1,243,538.26
	GRAND TOTAL	13,678,920.83

CARACOL ROAD UPGRADE PROJECT					
LOT 1, CONTRACT 1B (Tripartite Junction - Blancaneaux Lodge Line)					
Bill of Quantities					
Dec-18					
Item	Description	Unit	Qty	Rate	Amount (BZ\$)
Bill No. 1 PRELIMINARY AND GENERAL					
1.1	Complete Establishment of Contractor's Camp and maintenance of same.	LS	1	175,000.00	175,000.00
1.2	Accommodation, Service, and Attendance for the Engineer's Staff				
	(a) Office building complete as specified including furniture, equipment, and supplies	LS	1	92,000.00	92,000.00
	(b) Laboratory building complete as specified including furniture, equipment, and supplies	LS	1	82,000.00	82,000.00
	(c) Maintain Engineers site office and laboratory	Mon	18	2,500.00	45,000.00
1.3	Supply Engineer's Vehicles				
	(a) Provide Vehicle Type A	No	1	95,000.00	95,000.00
	(b) Provide Vehicle Type B	No	1	85,000.00	85,000.00
	(c) Provide licensing, insurance, repairs, maintenance, and operating costs for each of the three vehicles for the contract duration.	Ven Mon	54	2,500.00	135,000.00
1.4	Engineer's Accommodation				
	Building, House Type, Complete, as Specified, including fixtures, furniture, and equipment				
	(a) Type A House	LS	1	81,000.00	81,000.00
	(b) Type B House	LS	1	72,000.00	72,000.00
1.5	Traffic flow control, watching and lighting and construction and maintenance of temporary diversions	Mon	18	2,500.00	45,000.00
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))	Incorporated in the rates as noted in Bill of Quantities Preamble clause 7.7.1 (iii)			
1.7	Provision of Quality Control Plan detailing all quality assurance and testing requirements	LS	1	5,000.00	5,000.00
1.8	Provision of Environmental Protection and Mitigation Measures	Mon	18	1,500.00	27,000.00
1.9	Services				
	(a) Service Authority Liaison	LS	1	2,500.00	2,500.00
	(b) Provisional Sum allowance of \$3,000.00 for the location, pot hole, and survey of existing services within the extent of the work.	PS	1	3,000.00	3,000.00
	(c) Provisional Sum allowance of \$3,000.00 for the protection of existing services.	PS	1	3,000.00	3,000.00
	(c) Provisional Sum allowance of \$8,500.00 for the relocation of existing utility poles.	PS	1	8,500.00	8,500.00
1.10	Provisional Sum allowance of \$8,500.00 for project information signs.	PS	1	8,500.00	8,500.00
1.11	Insurances	LS	1	275,000.00	275,000.00
1.12	Performance Bond	LS	1	200,000.00	200,000.00
	TOTAL BILL No. 1				1,439,500.00
Bill No. 2 EARTHWORKS					
2.1	SITE CLEARANCE				
	Clear the site of works of all vegetation, debris, and deleterious material. All material to be removed from site becoming property of the Contractor on leaving the site.	LS	1	73,350.00	73,350.00
2.2	TOPSOIL STRIPPING				
	Strip topsoil from the site of works and dispose of clear of works becoming property of the contractor on leaving the site.	m3	23650	8.00	189,200.00
2.3	UNDERCUTTING				
	(a) Undercut material below topsoil strip level in fill areas and remove to dump areas (provisional item)	m3	550	18.00	9,900.00
	(b) Undercut material below subgrade level in fill areas and remove to dump areas (provisional item)	m3	5500	18.00	99,000.00
2.4	HARDFILL				
	Supply, transport, place, and compact hardfill in undercut areas as directed by the Engineer. (provisional item)	m3	2750	45.00	123,750.00
2.5	CUT TO FILL				
	Excavate in all materials met, haul, place, and compact material in fill embankments and undercut areas (measured in borrow)	m3	64500	10.00	645,000.00

Item	Description	Unit	Qty	Rate	Amount (BZ\$)
2.6	BORROW TO FILL				
	Source area to borrow, excavate, load, transport, place, and compact borrow material in embankments and undercut areas (measured in borrow)				
	(a) 0 to 5 km	m3	32000	18.00	576,000.00
	(b) 5 to 10 km	m3	25750	24.00	618,000.00
	(c) 10 to 15 km	m3	550	32.00	17,600.00
2.7	CUT TO WASTE				
	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 in surplus to quantities required for embankment construction	m3	45000	10.00	450,000.00
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 268 kW or greater	m3	1650	50.00	82,500.00
	(b) Extra Over to 2.5 and 2.8, for excavation in rock requiring blasting.	m3	17600	50.00	880,000.00
2.9	VERGE/BATTER PROTECTION				
	(a) Topsoil				
	Uplift from stockpile and place 100mm deep topsoil layer on batter slopes and elsewhere as directed by the Engineer. Include for grassing and maintenance (provisional item)	m2	11000	3.00	33,000.00
	(b) Sprigging				
	Construct topsoil layer 100mm deep including sprigging (provisional item)	m2	5500	3.00	16,500.00
	(c) Turfing				
	Construct turfing and place sods on batters. Include for establishment, maintenance, and rehabilitation of turfing area (provisional item)	m2	5500	3.00	16,500.00
2.1	REMEDICATION OF ABANDONED SECTIONS OF ROAD				
	Provisional sum allowance of \$55,000.00 for the rediation of abandoned sections of road as directed by the Engineer.	PS	1	55,000.00	55,000.00
	TOTAL BILL No. 2				3,885,300.00
	Bill No. 3 QUARRY AND BORROW SITE DEVELOPMENT AND OPERATIONS				
3.1	QUARRY AND BORROW SITE MANAGEMENT PLANS				
	Prepare, submit, and revise as necessary quarry/borrow site management plans inclusive of initial, intermediate, and final topographical survey and volumes calculations, the following contractor nominated sites:				
	(a)	LS	1	2,000.00	2,000.00
	(b)	LS	1	2,000.00	2,000.00
	(c)	LS	1	2,000.00	2,000.00
	(d)	LS	1	2,000.00	2,000.00
	(e)	LS	1	2,000.00	2,000.00
3.2	ENVIRONMENTAL REQUIREMENTS				
	Construct/provide and maintain all required environmental mitigation including silt detention ponds:				
	(a)	LS	1	2,000.00	2,000.00
	(b)	LS	1	2,000.00	2,000.00
	(c)	LS	1	2,000.00	2,000.00
	(d)	LS	1	2,000.00	2,000.00
	(e)	LS	1	2,000.00	2,000.00
3.3	FACILITIES				
	Allow for construction and maintenance of all buildings, services, and warning devices necessary to comply with specified requirements at all sites.				
	(a)	LS	1	2,000.00	2,000.00
	(b)	LS	1	2,000.00	2,000.00
	(c)	LS	1	2,000.00	2,000.00
	(d)	LS	1	2,000.00	2,000.00
	(e)	LS	1	2,000.00	2,000.00
	TOTAL BILL No. 3				30,000.00
	Bill No. 4 DRAINAGE				
4.1	REMOVE EXISTING CULVERTS				
	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.	11	500.00	5,500.00
4.2	SINGLE PIPE CROSS ROAD CULVERTS				

Item	Description	Unit	Qty	Rate	Amount (BZ\$)
	Excavate for, bed, and construct reinforced soil tight jointed pipe culverts. Including bedding, hardfill surrounds and backfill.				
	(a) 600 dia	m	110	536.70	59,037.00
	(b) 750 dia	m	80	656.70	52,536.00
	(c) 900 dia	m	27	816.40	22,042.80
	(d) 1200 dia	m	110	1,111.20	122,232.00
4.3	Not Used				
4.4	ADDITIONAL CROSS ROADPIPE CULVERTS				
	Provisional Sum allowance of \$25,000.00 for additional pipe culverts installed at direction of the Engineer.	PS	1	25,000.00	25,000.00
4.5	CULVERTS FOR ACCESSWAYS				
	Excavate for, bed, and construct HDPE pipe culverts at property accessways, including bedding, hardfill surrounds and backfill.				
	(a) 450 dia	m	11	407.70	4,484.70
	(b) 600 dia	m	24	496.00	11,904.00
	(a) 750 dia	m	10	590.60	5,906.00
	(b) Twin 750 dia	m	5	659.50	3,297.50
4.6	INLET & OUTLET STRUCTURES FOR CROSS ROAD PIPE CULVERTS (TYPE 1)				
	Excavate for and construct reinforced concrete end structure. Including bedding, hardfill surrounds, and backfill.				
	(a) 600 dia	m3	45.2	1,132.00	51,166.40
	(b) 750 dia	m3	16.2	1,204.00	19,504.80
	(c) 900 dia	m3	8	1,193.00	9,544.00
	(d) 1200 dia	m3	38.4	1,157.00	44,428.80
4.7	INLET & OUTLET STRUCTURES (TYPE 2) FOR CROSS ROAD PIPE CULVERTS				
	Excavate for and construct reinforced concrete end structure. Including bedding, hardfill surrounds, and backfill.				
	(a) 600 dia	m3	4.6	1,132.00	5,207.20
	(b) 750 dia	m3	2	1,204.00	2,408.00
	(c) 900 dia	m3	7.3	1,193.00	8,708.90
4.8	MOUNTABLE GROUTED RIP RAP INLET AND OUTLET STRUCTURES FOR HDPE ACCESS CULVERTS				
	(a) 450 dia	m2	22	55.00	1,210.00
	(b) 600 dia	m2	60	55.00	3,300.00
	(a) 750 dia	m2	13	55.00	715.00
	(b) 900 dia	m2	17.8	55.00	979.00
4.9	UNDERCUT				
	Undercut unsuitable material below culvert trench or structure foundation level. Remove undercut material to dump. Include for backfilling undercut with compacted backfill	m3	28	81.00	2,268.00
4.10	EXCAVATION IN ROCK				
	Extra over to Item 4.17 to allow for excavation in rock (provisional item)	m3	28	75.00	2,100.00
4.11	GABION BASKETS				
	Supply 2x1x1 gabion baskets and composite materials and construct inlet and outlet headwalls, protection works and retaining walls where directed (provisional sum)	m3	250	250.00	62,500.00
4.12	RENO MATTRESS				
	Supply Reno Mattress and composite material for scour protection at inlet and outlet structures (provisional item)	m3	175	250.00	43,750.00
4.13	ROCK RIP RAP				
	(a) Supply and place rock rip rap at culvert outlets (provisional sum)	m3	965	45.00	43,425.00
	(b) Supply and place 150 - 250mm rock rip rap inside and toe drains where detailed or directed.	m3	12250	35.00	428,750.00
4.14	GROUTED RIP RAP LINING				
	Cemented rock rip rap lining for side and toe drains	m2	2680	55.00	147,400.00
4.15	CONCRETE SIDE DRAIN LINING				
	Concrete lining for side drains (provisional sum)	m2	70	65.00	4,550.00
4.16	TOE DRAINS TO FILL BATTERS				
	Excavate toe drains to fill batters and discharge to water course as directed or detailed. (provisional sum)	m	2700	35.00	94,500.00
	TOTAL BILL No. 4				1,288,355.10

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Item	Description	Unit	Qty	Rate	Amount (BZ\$)
	Bill No. 5 PAVEMENTS & SURFACING				
5.1	SUB-GRADE IMPROVEMENT LAYER				
	Supply, place, and compact sub-grade improvement materials specified. (provisional sum)	m3	11625	30.00	348,750.00
5.2	SUB-BASE COURSE				
	Supply, place, and compact "crushed material" sub-base	m3	23500	51.50	1,210,250.00
5.3	BASE COURSE				
	Supply, place, and compact base course	m3	20215	58.00	1,172,470.00
	BITUMINOUS SURFACE TREATMENT				
5.4	PRIME COAT				
	Supply materials and apply MC70 prime coat and binder (provisional)	m2	99275	5.00	496,375.00
5.5	FIRST COAT SEAL				
	Supply materials and apply first coat bituminous binder and grade 3 chips	m2	99275	5.00	744,562.50
5.6	SECOND COAT SEAL				
	Supply materials and apply second coat bituminous binder and grade 1 chips	m2	91930	8.50	781,405.00
5.7	PRE-COATING OF CHIPS				
	Extra over to Items 5.6 and 5.7 supply binder and precoat chips as specified where directed by the Engineer. (provisional item)	m2	191200	1.00	191,200.00
	TOTAL BILL No. 5				4,945,012.50
	Bill No. 6 ROAD MARKING, FURNITURE, AND MISCELLANEOUS WORKS				
6.1	ROAD MARKING PAINT				
	(a) Edgeline, 100mm wide continuous	m	18250	6.50	118,625.00
	(b) Centreline, 100mm wide dashed yellow (3m stripe, 7m gap)	m	7760	6.50	50,440.00
	(c) White broken edgeline (1m stripe, 2m gap)	m	440	6.50	2,860.00
	(d) Not used				-
	(e) Yellow stop limit line (300mm wide)	m	100	19.50	1,950.00
	(f) Yellow continuous prohibitory line (No overtaking)	m	1430	6.50	9,295.00
	(g) White Painted Stop	No.	12	180.00	2,160.00
	(h) Not used				
	(i) Not used				
	(j) Not used				
	(k) Not used				
6.2	SIGNS				
	(a) Supply and erect 1 panel single post signs	No.	65	812.50	52,812.50
	(b) Supply and erect 4 panel single post signs	No.	2	1,562.50	3,125.00
	(c) Supply and erect 1 panel double post signs	No.	5	1,062.50	5,312.50
	(d) Supply and erect PW-68.5 post sign	No.	11	1,312.50	14,437.50
	(e) Provisional sum allowance of \$8,000.00 for the dismantle, refurbish, and re-erection of existing overhead sign gantry structure and attach new signs as directed by the Engineer.	PS	1	8,000.00	8,000.00
	(f) Remove existing redundant signs (provisional item)	No.	10	50.00	500.00
	(g) Supply and erect WI-8 chevrons	No.	110	812.50	89,375.00
6.3	EDGE MARKER POSTS				
	Supply and erect edge marker posts	No.	710	25.00	17,750.00
6.4	RAISED REFLECTORISED PAVEMENT MARKERS				
	Supply and install RRPMs				
	(a) Yellow	No.	450	20.00	9,000.00
6.5	ROADSIDE BARRIERS				
	(a) Supply composite materials and construct galvanised steel W-Section guard rails as detailed and specified	m	1450	145.00	210,250.00
	(b) Supply and install TL-3 LEADING energy absorbing terminal ends to guardrails	No.	22	2,730.64	60,074.08
	(c) Extra over for supply of composite materials for transition to and structural connection to bridge barriers.	No.	10	2,059.04	20,590.40
6.6	STREET LIGHTS				
	Supply and install street lighting poles, outreaches, fittings, cable, controls, and connect to network				
	(a) Provisional sum allowance of \$11,000.00 for supply and installation of solar powered LED street lighting.	PS	1	11,000.00	11,000.00
6.7	FENCING				

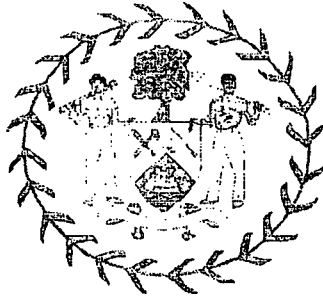
Item	Description	Unit	Qty	Rate	Amount (BZ\$)
	(a) Dismantle existing post and wire fences and remove from site or stockpile for re-use (provisional sum)	m	140	13.60	1,904.00
	(b) Dismantle existing fence types other than post and wire and remove from site or stockpile for re-use. (provisional sum)	m	140	20.35	2,849.00
	(c) Re-erect post and wire fence line using stockpiled materials. Include for new sundry items (nails, staples, etc) (provisional item)	m	140	37.25	5,215.00
	(d) Supply composite materials and construct post and wire fence (provisional item)	m	140	54.50	7,630.00
	(e) Provisional sum allowance of \$5,500.00 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	5,500.00	5,500.00
6.11	CONCRETE PEDESTRIAN ACCESS SLABS				
	(a) Double slab (provisional item)	No.	2	2,196.00	4,392.00
6.12	WATERMAIN RELOCATIONS				
	(a) Provisional sum allowance of \$50,000.00 for the relocation of existing watermain.	PS	1	50,000.00	50,000.00
	TOTAL BILL No. 6				765,046.98
	Bill No. 7 CONSTRUCTION OF LITTLE VAQUEROS BRIDGE				
7.1	Demolition of existing bridge to construct new bridge	LS	1	15,000.00	15,000.00
7.2	Supply, construct reinforced concrete base for west abutment				
	(a) Concrete (4500psi)	m3	127	450.00	57,150.00
	(b) Steelwork	t	7.532	5,500.00	41,426.00
	(c) Formwork	m2	224	55.00	12,320.00
7.3	Supply, construct reinforced concrete base for east abutment				
	(a) Concrete (4500psi)	m3	127	450.00	57,150.00
	(b) Steelwork	t	7.532	5,500.00	41,426.00
	(c) Formwork	m2	224	55.00	12,320.00
7.4	Supply, construct reinforced concrete wall and wing wall for west abutment				
	(a) Concrete (4500psi)	m3	54	450.00	24,300.00
	(b) Steelwork	t	2.648	5,500.00	14,564.00
	(c) Formwork	m2	238	55.00	13,090.00
7.5	Supply, construct reinforced concrete wall and wing wall for east abutment				
	(a) Concrete (4500psi)	m3	54	450.00	24,300.00
	(b) Steelwork	t	2.648	5,500.00	14,564.00
	(c) Formwork	m2	238	55.00	13,090.00
7.6	Supply, transport, and install inverted tee beam	m	45	250.00	11,250.00
7.7	Supply, construct plinth and shear key				
	(a) Concrete (4500psi)	m3	4	450.00	1,800.00
	(b) Steelwork	t	0.25	5,500.00	1,375.00
	(c) Formwork	m2	20	55.00	1,100.00
7.8	Supply, construct reinforced concrete deck slab				
	(a) Concrete (4500psi)	m3	16	450.00	7,200.00
	(b) Steelwork	t	1.98	5,500.00	10,890.00
	(c) Formwork	m2	70	65.00	4,550.00
7.9	Supply and install pedestrian metal rails. Include for all galvanized tubing, bolt assembly, and welding, welding to be painted with two coats galvanized paints.	m	40	188.60	7,544.00
7.10	Supply, construct reinforced concrete settlement slab				
	(a) Concrete (4500psi)	m3	15	450.00	6,750.00
	(b) Steelwork	t	0.941	5,500.00	5,175.50
	(c) Formwork	m2	7	55.00	385.00
7.11	Supply, install expansion joint, and placing Sikasil 728 SL and backon rod	m	24	238.60	5,726.40
7.12	Provide and place compacted engineered backfill to abutments to level of settlement slab	m3	16	125.00	2,000.00
	TOTAL BILL No. 7				406,445.90

CARACOL ROAD UPGRADE PROJECT					
LOT 1, CONTRACT 1B (Tripartite Junction - Blancaneaux Lodge Line)					
Bill of Quantities					
Dec-18					
Item	Description	Unit	Qty	Rate	Amount (BZ\$)
	Bill No. 8 DAYWORKS				
8.1	Labour				
8.1.1	Foreman	hr	100	20.00	2,000.00
8.1.2	Driver (Operator)	hr	200	10.00	2,000.00
8.1.3	Skilled Labourer	hr	200	12.00	2,400.00
8.1.4	Unskilled Labourer	hr	400	8.00	3,200.00
8.1.5	Tradesman	hr	200	12.00	2,400.00
8.1.6	Surveyor	hr	100	15.00	1,500.00
8.1.7	Technician	hr	100	20.00	2,000.00
	Subtotal for Dayworks: 2 Materials				15,500.00
8.2	Materials				
8.2.1	Petrol (Gasoline)	US Gal	200	5.25	1,050.00
8.2.2	Diesel Oil	US Gal	400	5.25	2,100.00
8.2.3	Lubricant	kg	100	5.25	525.00
8.2.4	Bitumen Cut-back MC-70	t	2	1,400.00	2,800.00
8.2.5	Bitumen MC-3000	t	2	1,400.00	2,800.00
8.2.6	Road Paint	l	100	10.00	1,000.00
8.2.7	Portland Cement	t	2	400.00	800.00
8.2.8	Mild steel reinforcement	t	1	2,200.00	2,200.00
8.2.9	High yield steel reinforcement	t	4	2,200.00	8,800.00
8.2.10	Fine Aggregate for concrete	m3	10	35.00	350.00
8.2.11	Coarse aggregate for concrete	m3	10	35.00	350.00
8.2.12	Concrete class C30	m3	10	275.00	2,750.00
8.2.13	Structural steel RSJ, UB, etc.	t	2	2,200.00	4,400.00
8.2.14	Granular material for sub-base	m3	40	27.70	1,108.00
8.2.15	Crushed aggregate for sub-base	m3	100	25.00	2,500.00
8.2.16	Crushed aggregate for base course	m3	100	35.00	3,500.00
8.2.17	Crushed aggregate for road surface chips	m3	20	58.46	1,169.20
8.2.18	Gabion Baskets (2x1x1) Cage only	ea	10	102.58	1,025.80
8.2.19	Reno Mattress (2x1x.3) Cage only	ea	10	86.46	864.60
	Subtotal for Dayworks: 2 Materials				40,092.60
8.2.20	Add 15 percent of subtotal for contractors overhead, profit, etc.				6,013.89
8.3	Contractor Equipment				
8.3.1	Bulldozer 70kW	hr	10	75.35	753.50
8.3.2	Bulldozer 150kW	hr	10	150.00	1,500.00
8.3.3	Bulldozer 250kW	hr	10	250.00	2,500.00
8.3.4	Motor Grader 110kW	hr	20	125.00	2,500.00
8.3.5	Motor Scraper 250kW	hr	20	250.00	5,000.00
8.3.6	Hydraulic Excavator 10-14t	hr	20	150.00	3,000.00
8.3.7	Hydraulic Excavator 15-24t	hr	20	225.00	4,500.00
8.3.8	Hydraulic Excavator 25-35t	hr	10	275.00	2,750.00
8.3.9	Track-type Loader 80kW	hr	20	125.00	2,500.00
8.3.10	Road Stabiliser 15-24t	hr	10	94.18	941.80
8.3.11	Screening Plant 100t/hr	hr	10	150.00	1,500.00
8.3.12	Wheel Loader 60kW	hr	10	110.00	1,100.00
8.3.13	Wheel Loader 130kW	hr	20	150.00	3,000.00
8.3.14	Air Compressor 5000 l/min	hr	5	50.00	250.00
8.3.15	Generator 15kW	hr	20	40.00	800.00
8.3.16	Generator 150kW	hr	20	75.00	1,500.00
8.3.17	Motor Blower	hr	10	10.00	100.00
8.3.18	Self Propelled Road Painting Machine	hr	10	100.00	1,000.00
8.3.19	Bitumen Distributor	hr	10	184.75	1,847.50
8.3.20	Chip Spreader 5m3	hr	10	125.00	1,250.00
8.3.21	Dump Truck 15t	hr	10	80.00	800.00
8.3.22	Tipper Truck 15t	hr	20	80.00	1,600.00
8.3.23	Self Propelled Vibrating Roller 8t	hr	20	75.00	1,500.00
8.3.24	Self Propelled Vibrating Roller 12t	hr	20	110.00	2,200.00

Item	Description	Unit	Qty	Rate	Amount (BZ\$)
8.3.25	Self Propelled Pneumatic Roller over 12t	hr	10	110.00	1,100.00
8.3.26	3 Wheel Steel Roller	hr	10	110.00	1,100.00
8.3.27	Vibrating Plate Compactor 0.4t	hr	10	25.00	250.00
8.3.28	Jackhammer 25kg	hr	10	225.00	2,250.00
8.3.29	Pick-up 1.7t	hr	20	40.00	800.00
8.3.30	Crushing Plant 50t/hr	hr	10	225.00	2,250.00
8.3.31	Concrete Mixer 12kW 0.5m3	hr	20	21.55	431.00
8.3.32	Concrete Vibrator 35mm diamter	hr	20	25.00	500.00
8.3.33	Concrete Vibrator 50mm diamter	hr	30	25.00	750.00
8.3.34	Concrete Truck 12t	hr	10	104.43	1,044.30
8.3.35	Truck Mounted Crane 10t	hr	10	118.62	1,186.20
8.3.36	Truck Mounted Crane 50t	hr	10	250.00	2,500.00
8.3.37	Pile Driving Hammer	hr	10	250.00	2,500.00
8.3.38	Self Propelled Water Tanker 6000 litre	hr	10	50.00	500.00
8.3.39	Self Propelled Fuel Tanker 6000 litre	hr	10	50.00	500.00
8.3.40	Water Pump 50mm Diameter Centrifugal	hr	10	10.00	100.00
8.3.41	Water Pump 100mm Diameter Centrifugal	hr	10	25.00	250.00
8.3.42	Arc Welding Equipment	hr	10	25.00	250.00
8.3.43	Oxtacetylene Equipment	hr	10	10.00	100.00
	Subtotal for Dayworks: 3 Contractors Equipment				20,561.50
1	LABOUR				15,500.00
2	MATERIALS				46,106.49
3	CONTRACTOR'S EQUIPMENT				20,561.50
	TOTAL BILL No. 8 DAYWORKS (Provisional Item)				82,167.99

CONTRACTOR'S TECHNICAL PROPOSAL

CERTIFICATE NO: 18140



**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 2011;**

**AND IN THE MATTER of the application for registration and for a Certificate of
Incorporation for A & N CONSTRUCTIONS LTD.**

IT IS HEREBY CERTIFIED THAT

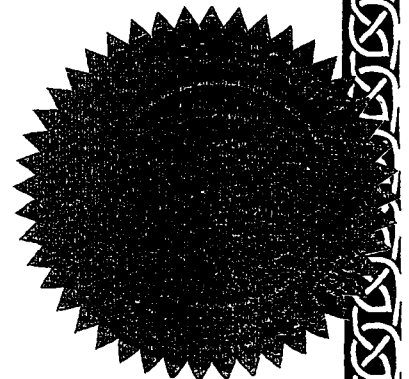
A & N CONSTRUCTIONS LTD.

**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 13TH day of November, 2019.**


PATRICIA RODRIGUEZ
FOR DEPUTY REGISTRAR

FOR REGISTRAR OF COMPANIES AND CORPORATE AFFAIRS





BELIZE COMPANIES AND CORPORATE AFFAIRS REGISTRY

Ground Floor of Garden City Hotel,

Mountain View Boulevard,

City of Belmopan, Cayo District,

Belize Central America

Tel: 501-822-0421

Fax: 501-822-0422

REF: 88/9/1A/03(12041)

DATE: 13th November, 2019

COMPANIES ACT

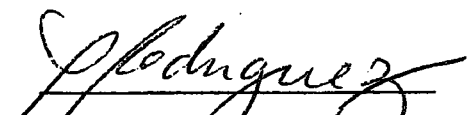
(CAP. 250, SECTION 17)

CERTIFICATE OF COMPLIANCE

IT IS HEREBY CERTIFIED that the Memorandum and Articles of Association of "A & N CONSTRUCTIONS LTD." situated at Spanish Lookout, Cayo District, Belize C.A. comply with the requirements of the Companies Act (Chapter 250).

This certification is subject to section 9(1) of the said Act.

DATED this 13th day of November, 2019.


PATRICIA RODRIGUEZ
FOR DEPUTY REGISTRAR
FOR ATTORNEY GENERAL



POWER OF ATTORNEY

BY THIS POWER OF ATTORNEY given on the 1st June 2019, A&N Construction, a company formed under the laws of Belize with its registration office located at Route 20 East, Spanish Lookout, Cayo (hereinafter called the "Donor") **HEREBY AUTHORIZE** Norman Reimer (hereinafter called the "Attorney") the true and lawful Attorney of the Donor, for it and in its name, place, and stead to execute all tender documents generally for Works to be undertaken by the Donor under the proposed contracts or otherwise and to do all necessary acts and things in connection thereto, for and on behalf of the Donor.

And it is hereby declared that the Donor ratifies, confirms, and agrees to ratify, and conform whatsoever the Attorney shall do or purport to do by virtue of this Power of Attorney.

Executed as a deed by A&N Construction, by its authorized representative on the day and year above written.

Director/Secretary: Norman Reimer

Date: 1st June 2019

Witness: Kathrine P

Date: 1st June 2019

Justice of the Peace: 

Date: 1st June 2019

Norman Dueck
Justice of the Peace



ATTACHMENTS

OFFICE FURNITRE, EQUIPMENT AND CONSUMABLES

LOT 1 - CONTRACT - 1 A

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
OFFICE FURNITURE		
1	<u>Desks,</u> Each office desk shall have a surface area of at least 1.5 sqm and shall be provided with at least three drawers, one of which can be locked.	6
2	<u>Office chairs,</u> Shall be robust and comfortable	18
3	<u>Steel Cabinet,</u> Shall have at least 1.5 sqm shelf area and a volume of 0.70 cum each. Each cabinet shall have a lock with two keys	2
4	<u>Steel filing cabinets,</u> Shall each be fitted with four drawers on runners. Each cabinet shall be fitted with a lock and shall be 1300 mm high, 460 mm wide and 600mm from front to back.	4
5	<u>Shelves,</u> Shall be suitable for storing all the contract drawings or shall else be as detailed on the drawings.	2
6	<u>Conference Table,</u> Shall be large enough to seat twelve people and shall have an area of at least 5 sqm.	1
7	<u>Table,</u> For the project manager office for 4 persons with chairs	1
COMPUTERS		

8	<p><u>Type A:</u></p> <p><u>DELL Compatible Desktop.</u></p> <ul style="list-style-type: none"> -With a core i7 2.8 GHz processor or higher, -Multi-scan 17" SVGA color monitor (low radiation), -Random access memory of 4 GB and above and fitted with CD drive, -A DVD-RW Drive (52xspeed) -A hard disk with a capacity of 500GB. -The computer will have more than two serial ports, one parallel port, and four USB ports be supplied with a mouse. -A voltage regulator and emergency power interrupt unit with 30 minutes duration backup UPS shall also be supplied. 	2
9	<p><u>Type B:</u></p> <p><u>Laptop computers.</u></p> <ul style="list-style-type: none"> -With a 15." XTFT color screen, a core i7 2.2 GHz -Processor or higher, EISA Bus, IDE controller, -Random access memory of 4 GB and above and fitted with a CD drive - DVD-RW Drive/Recorder CD-RW of type compatible with the computers of type A -A hard disk with a capacity of 500 GB or higher. -The computer shall have more than two serial ports one parallel port, two UBS ports and be supplied with a mouse. -A separate multi-scan 17 svga color monitor (low radiation) 1368x768 resolution, 70 Hz refresh rate, ET 400graphics card. -201 keyboard shall also be provided with necessary adapter cable. -A voltage regulator and emergency power interrupt unit 	4
SOFTWARE		
10	MS Windows 7 or higher	6

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11	MS Office 2010 professional or higher	6
12	Approved Virus detection software with update support	6
13	Lap link for windows with associated cable (for Type B computers only)	6
14	MS Project 2010 or higher for Windows	6
15	Autocad 2012 or more recent for Windows	6
16	Eagle Points, Civil Series software for Windows for road design and earthworks calculations: Roadcalc, Surface Modeling, Profiles, COGO, Data Transfer, Data Collection, Drafting, Intersection Design, running in AutoCAD environment. In alternative to the above mentioned modules of Eagle Point Civil Series software for road design, the Engineer may instruct the Contractor to provide software, of similar characteristics, for road / pavement design from a different software producer.	6
PRINTER, SCANNER, PHOTOCOPY MACHINE AND CAMERA		
17	LaserJet, technology with speed of 15 pages per minute resolution 600*600 size A4, printer shall be supplied with suitable cables and switches to connect the printer to the computers.	1
18	DeskJet/Laser jet, A3 & A4 size color & Black and white resolution 1200*1200 DPI or more recent, printer shall be supplied with suitable cables and switches to connect the printer to the computers.	1
19	Photocopy machine, have speed of 15 pages per minutes A4 & A3 size with good zooming capacity and shall be capable of self feeding and producing copies up to A4 & A3 size, with capabilities for the reduction and enlargement of documents	1
20	Plotter, shall be of the Hewlett-Packard Design Jet 750type or approved similar type and shall be used for the automatic plotting of road surveys alignment drawings and cross-sections at up to A0 size	1

21	<p>Digital camera,</p> <p>The camera shall be of the Cannon/Sony digital camera type or equivalent, image resolution 640 x 480, high resolution, 61 image memory type or similar as approved by the Engineer and should be supplied with all relevant computer hardware accessories and software. The camera should also be compatible with the supplied computer hardware and software.</p>	2
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LOT 1 - CONTRACT - 1 B

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
OFFICE FURNITURE		
1	<p><u>Desks,</u></p> <p>each office desk shall have a surface area of at least 1.5 sqm and shall be provided with at least three drawers, one of which can be locked.</p>	5
2	<p><u>Office chairs,</u></p> <p>shall be robust and comfortable</p>	17
3	<p><u>Steel Cabinet,</u></p> <p>shall have at least 1.5 sqm shelf area and a volume of 0.70 cum each. Each cabinet shall have a lock with two keys</p>	2
4	<p><u>Steel filing cabinets,</u></p> <p>shall each be fitted with four drawers on runners. Each cabinet shall be fitted with a lock and shall be 1300 mm high, 460 mm wide and 600mm from front to back.</p>	4
5	<p><u>Shelves,</u></p> <p>shall be suitable for storing all the contract drawings or shall else be as detailed on the drawings.</p>	2
6	<p><u>Conference Table,</u></p> <p>shall be large enough to seat twelve people and shall have an area of at least 5 sqm.</p>	1
7	<p><u>Table,</u></p>	1

	for the project manager office for 4 persons with chairs	
COMPUTERS		
8	<p><u>Type A:</u></p> <p><u>DELL Compatible Desktop.</u></p> <ul style="list-style-type: none"> -With a core i7 2.8 GHz processor or higher, -Multi-scan 17" SVGA color monitor (low radiation), -Random access memory of 4 GB and above and fitted with CD drive, -A DVD-RW Drive (52xspeed) -A hard disk with a capacity of 500GB. -The computer will have more than two serial ports, one parallel port, and four USB ports be supplied with a mouse. -A voltage regulator and emergency power interrupt unit with 30 minutes duration backup UPS shall also be supplied. 	2
9	<p><u>Type B:</u></p> <p><u>Laptop computers.</u></p> <ul style="list-style-type: none"> -With a 15." XTFT color screen, a core i7 2.2 GHz -Processor or higher, EISA Bus, IDE controller, -Random access memory of 4 GB and above and fitted with a CD drive - DVD-RW Drive/Recorder CD-RW of type compatible with the computers of type A -A hard disk with a capacity of 500 GB or higher. -The computer shall have more than two serial ports one parallel port, two UBS ports and be supplied with a mouse. -A separate multi-scan 17 svga color monitor (low radiation) 1368x768 resolution, 70 Hz refresh rate, ET 400graphics card. 	3

	-201 keyboard shall also be provided with necessary adapter cable. -A voltage regulator and emergency power interrupt unit	
SOFTWARE		
10	MS Windows 7 or higher	5
11	MS Office 2010 professional or higher	5
12	Approved Virus detection software with update support	5
13	Lap link for windows with associated cable (for Type B computers only)	5
14	MS Project 2010 or higher for Windows	5
15	Autocad 2012 or more recent for Windows	5
16	Eagle Points, Civil Series software for Windows for road design and earthworks calculations: Roadcalc, Surface Modeling, Profiles, COGO, Data Transfer, Data Collection, Drafting, Intersection Design, running in AutoCAD environment. In alternative to the above mentioned modules of Eagle Point Civil Series software for road design, the Engineer may instruct the Contractor to provide software, of similar characteristics, for road / pavement design from a different software producer.	5
PRINTER, SCANNER, PHOTOCOPY MACHINE AND CAMERA		
17	LaserJet, technology with speed of 15 pages per minute resolution 600*600 size A4, printer shall be supplied with suitable cables and switches to connect the printer to the computers.	1
18	DeskJet/Laser jet, A3 & A4 size color & Black and white	1

Technical Proposal

Site Organization

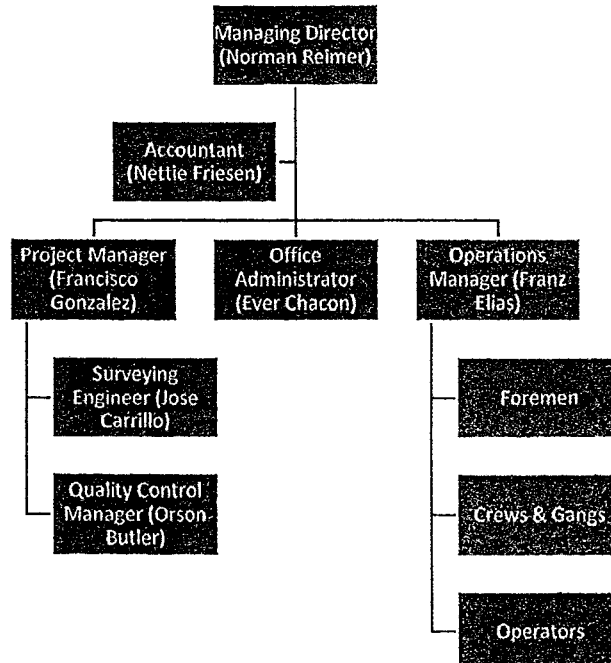
A&N Construction is a modern company with more than twenty years' experience dedicated to construct roads to meet the needs of its clients. A&N has been a registered business since 2003 and continues to thrive in the road construction industry.

The company has undertaken works for the Government of Belize and the private sector in the construction of roads, drains and drainage structures, and bridges.

The project will be the upgrading of 16.3km of road between Tripartite Junction and Blancaneaux Lodge Line which includes bridge construction. The major components of the project are:

- Bush and clear road reserve
- Construction of embankment
- Construction of side drains
- Setting cross-drainage structures
- Place selected, sub-base, and base materials
- Double surface dressing and road furniture

The proposed organizational chart for this project is shown below.



The Operations Manager in conjunction with the Project Manager will be responsible for the day-to-day onsite control of the construction project. They will ensure to prepare the site for the works, keep the project within the allotted construction period and budget as well as tackling any delays and issues

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issues that may arise. They will work to ensure the quality and the health and safety aspects of the project in conjunction with the supervision team.

The Project Manager will coordinate communication between all parties involved in the on-site development of the works and liaise with the public as issues arise.

Site logistics will be mainly managed by our Operations Manager who will ensure process optimization, delivery, movement, and installation of materials and components minimizing water and ensuring efficiency. Information management as it pertains to shop drawings and construction practices will be planned, managed, and distributed, by our Project Manager.

In addition, our Operations Manager will carry out equipment logistic ensuring optimal use of material and construction work, use of machinery and minimize waste ad material movement.

Our company is environmentally conscientious and will reduce, reuse, recycle and revitalize as resources allow through sustainable waste management.

Site security and safety will be paramount to avoid losses of materials and plant. Our managers will also act as safety officers to prevent fires, injuries, avoid accident and incidents, ands at the same time protect our equipment and property as well as protecting the public who traverse through our construction site.

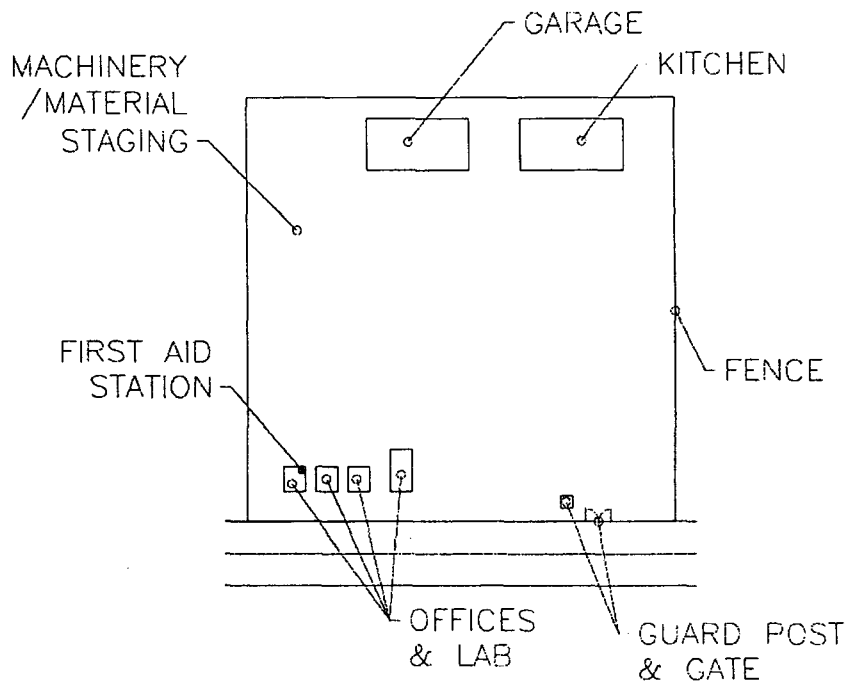


Figure 1 - Proposed Camp Site Layout

The figure above depicts the general camp site organization. A camp site is considered to be strategically placed within the project location and where public utilities such as light, water, internet, etc is available.

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The camp site will be cleared and grubbed and then graded to have proper drainage on site. The area will be fenced and secured.

The Consulting Engineer's Office will have all the facilities as outlined in the issued bidding documents with ample parking provided.

The Contractor's facilities will include, but not limited to, the following:

- Main office
- Workshop/garage
- Tools/spare storage room
- Carpenter/mechanic shop
- Laboratory room
- Fuel and bitumen storage
- General parking area

Road Construction Method Statement

Scope

The intention of this method statement is to define the activities involved in the construction for the Upgrading of the Caracol Road Project Lot 1 Contract 1B including traffic management, earthworks, drainage systems, new culverts, extending or demolishing existing culverts, and highway pavement with its signing, markings, other safety features and ancillary items.

Description of Works

The Project works comprise the following:

- Upgrading approximately 25.9km of road to provide a direct link between Santa Elena to Tripartite junction with and from Georgeville to Tripartite Junction.

Relevant Process/Specifications

- Contract Documents

Materials & Equipment

The major materials and equipment used for these works, but not limited to, include the following:

- Dozers
- Excavators
- Vibrating Plate
- Jumping Jack
- Total Station
- Concrete Trucks
- Concrete Pump
- Grader
- Sheep foot Roller
- Automatic Level
- Concrete
- Rebar
- Small tools & equipment
- Form work
- Dump Trucks
- Hydraulic Jacks
- Dial Gauges
- Diesel Hydraulic Hammer
- Crane

Procedure/Method

Method

Earthworks will be required to construct the cuttings and embankments required for the designed highway realignment. Drainage systems will be constructed to accommodate highway drainage and runoff from surrounding lands. Several structures will be constructed or modified including demolishing or extending existing culverts, constructing new culverts. When earthworks, drainage and structures are completed, construction of the new and improved carriageway will be carried out. This includes priming base, applying first and second coat of chip seal, road signing and pavement marking, and guardrail installations.

Mobilization of the plant and equipment will start upon receipt of instruction to proceed with the work. Materials will be stocked at the camp store. Materials will be transported to and from site by the truck and will be load and offloaded under supervision. All plant on site will be inspected on the periodically and the plant that has oil leaks will not allowed to operate on site.

It is understood that utility diversions are likely to be required as part of the project. These include but not limited to Belize Electricity Limited (BEL), locate water, internet, cable and other utilities. All efforts will be made to protect these facilities.

Safety precautions will be adhered by ensuring that all plants are operated by authorized operators. All workers will be provided with safety gears including dust masks, closed shoes, hand gloves, and goggles or as work dictates.

Site Clearance and Topsoil Stripping

Site clearance will take place along the proposed extents of work. All work areas will be cleared of bushes, vegetation, debris, and other obstructions by means of required equipment and machinery.

The removed soil shall be stripped down to specified depths below the existing ground level. The removed topsoil will be placed to designated areas within project site.

Openings to landowners adjacent to the works will be adjusted and left accessible by the end of each working day unless otherwise agreed upon with the landowner.

Setting Out

A Survey team consisting of one surveyor and three assistants will take levels and set out the works by use of pegs to mark points on the ground.

The initial tasks will include looking for and verifying of control points. During the construction, the surveying team will indicate and maintain the boundaries of clearing and grubbing, drain invert levels, as well as cut and fill.

Traffic Management

Traffic management will be carried out to ensure that all planned traffic movements can be accommodated throughout the construction phase of the project.

Where the existing roadway intersects with the realigned roadway temporary diversions will be constructed as shown in the contract drawings. These diversions will be clearly defined and signed.

Temporary diversion will be provided at the St. Margaret Bridge (vicinity of Station 51+000) as shown in contract documents at watercourse crossing requiring placement of culverts.

Where work is carried out along shoulders, these construction segments along roadway will be prepared in a way that traffic flow is always maintained and shall be properly controlled to allow vehicles to traverse construction zones safely.

For culvert construction, where the streams are flowing, temporary diversions will be done to allow water to continue flowing during construction.

Excavations

Upon acceptance of the setting out by the Engineer, excavations will be done from round level to design formation level by use of the excavator to the satisfaction of the Engineer including utilising a hydraulic breaker as ground conditions dictate. Cut material will be transported to fill area by attending dump trucks.

Drainage

While excavation for roadway is undertaken, contract shown drainage will be provided.

Surface Preparation

The formation level will be prepared, elevation level recorded and approved by the Engineer before placing fill material.

Fill

Fill section will be done with material product of excavation. All fill material shall be pre-approved by the Engineer in accordance with the project specifications.

Once formation level is achieved, tests will be undertaken as contract documents specify to determine CRB/bearing capacity of the ground. If proved suitable, the formation will be prepared to receive fill. If not suitable, this will be measured and removed, then material from cut sections will be placed and compacted. The fill will be proven by further testing.

Borrow Pits

Potential sources of sub-base and base material have been identified within the proposed project area. The development of these sources will be undertaken in accordance with the guidelines described in the contract document and in consultation with stakeholders such as Ministry of

Works, the Mining Department, the Department of the Environment, etc all in accordance with the laws of Belize.

Sub-Base and Base

Prior to placing sub-base and base material, the underlying surface will be shaped and compacted in accordance with the specifications. The material will be placed over the full of the formation to the required thickness as shown in contract documents on one layer not exceeding 200mm compacted thickness. Each layer will be compacted at its necessary moisture content. During construction, the level will be checked at regular intervals along centre and both sides of the pavement.

Chip Seal (Double Bituminous Surface Treatment)

The finished base course layer surface will be prepared to remove pot holes and ruts if any. Irregularities will be filled with base material and compacted at least a day before prime coat is applied.

Prime coat and Tack coats will be applied as specified along the entire width of base course layer to receive the double bituminous surface treatment (DBST).

Asphalt will be applied to the primed/tack coat area using the spray truck. Immediately after spraying the asphalt, a layer of 3/8" crushed gravel will be applied. The gravel will be compacted and embedded into the asphalt by rubber-tired rollers. The asphalt generally cures within two days in hot climate. Traffic will then be able to pass over this surface at a reduced speed (25mph maximum) during the curing process. After the third day, the loose gravel will be swept off the surface.

Quality Control

All plant will be inspected periodically for the duration of construction to ensure there is no leaks of oils or diesel, plant that have leakage will be remove from site immediately.

Concrete cylinders as per the original contract specified intervals will be cast to monitor quality of concrete laid to the base slab. Similar procedures will be applied to construct the walls, end structures/wind walls and finally the deck/top slab all to the satisfaction and approval of the Engineer.

Other inspections, verifications, and tests will be carried out, to ensure the quality and durability of the product as described in the procedures above, and as per the requirements given in the specification.

Finishing off

The objective is to restore as much as possible and as specified in the contract documents. This will be minimised by managing the disturbances.

Diversions will be close off and material will be compacted to acceptable standard, all excessive material will be taken away to the disposal site.

Safety Management and Control

Safety precaution will be taken complying with the Manual of Uniform Traffic Control Devices (MUTCD), Occupational Safety and Health Administration (OSHA) and the contract technical specifications.

Every precaution will be taken to avoid any accidents & damages to adjoining properties, workers, and road users.

All workers will be advised to wear closed shoes, high visibility vests, and gloves while working. There will be a stand by vehicle near site always if needed in a case of accident.

Utilities

Belize Electricity Limited, Belize Telecommunications Limited, Belize Water Services Limited, and other local utilities along the roadway will be consulted throughout the project to ensure that their facilities are located and protected.

Mobilization Schedule

The project start-up schedule will cover the period the initial requirements for starting the actual work i.e. kick-off meetings/ workshops, agree way forward with client, obtain client objectives, obtain required doc., initial mobilization activities, data collection, site inspection, meet project parties will be carried out.

During this period the coordination of electricity, water, waste, safety, layout of camp site, etc. will occur. Other activities will include, but not limited to, labour recruitment, work camp procurement and setup, access road constructed, site security, construction plant and equipment mobilized, and everything else included and required by the contract.

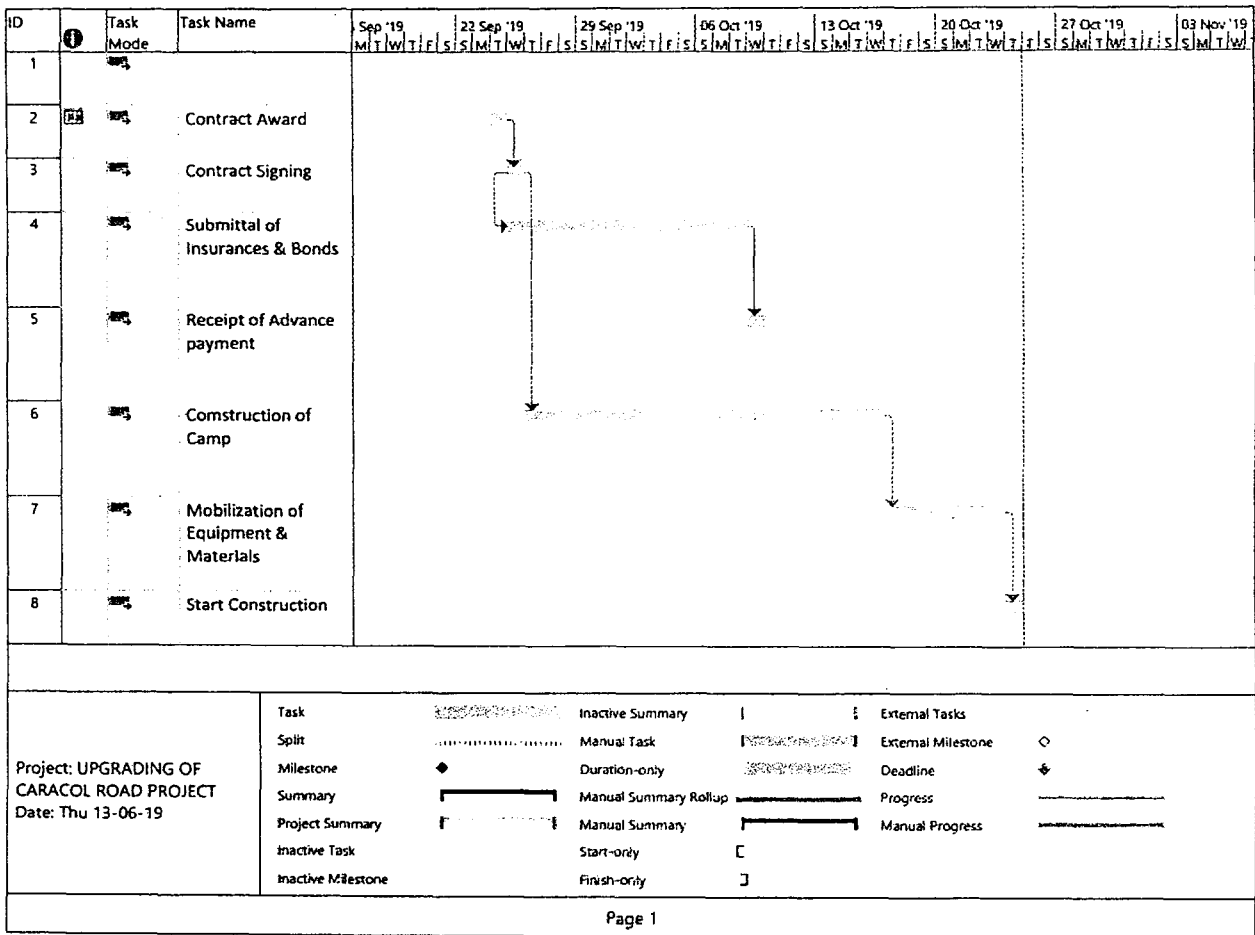


Figure 2 -Mobilization Schedule

The table above shows the approximate times for complete mobilization.

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Construction Schedule

Below is the preliminary projected schedule to meet practical completion of the Caracol Road project in 2022 to coincide with the construction period of 18 months allotted for the project.

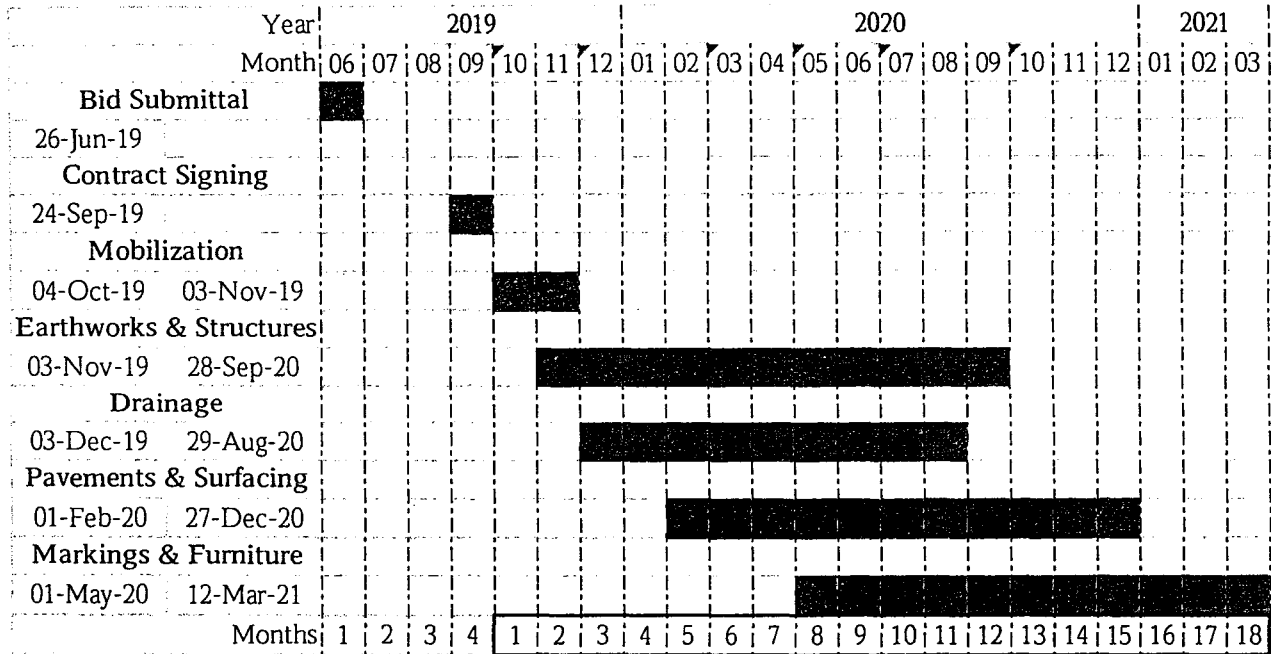


Figure 3 - Construction Schedule

This schedule may be highly dependent on relocation of any utility poles in conflict with the proposed road route.

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Equipment

The bidder must demonstrate that it has the key equipment listed hereafter.

No.	Equipment Type and Characteristics	Minimum Number Required
1	Cranes	1
2	Crushing Equipment & Accessories	As needed
3	Dozers	2
4	Loaders	2
5	Excavators	2
6	Graders	2
7	Bitumen Distributor	1
8	Rollers	2
9	Backhoes	2
10	Dump Trucks	8
11	Concrete Mixer Trucks	2
12	Concrete Mixer - Manual	2
13	Mechanical Sweeper	1
14	Rubber Wheel Rollers	2

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV, Bidding Forms

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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.

Item of Equipment: 1 – Crane (1)		
Equipment Information	Name of manufacturer Grove (1)	Model and power rating TMS865 – 350HP (1)
	Capacity* 65ton (1)	Year of manufacture* 1984 (1)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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: New Buildings	
	Address of owner: Spanish Lookout	
	Telephone: 615-6200	Contact name and title Mr. Frank Rempel
	Fax	Telex
Agreements	Details of <u>rental</u> / lease / manufacture agreements specific to the project	

Item of Equipment: 2 – Crushing Equipment & Accessories (1)		
Equipment Information	Name of manufacturer 902 Power Screen (1) 903 Conveyor 905 Power Screen 906 Power Screen	Model and power rating Maxtrak – 400HP (1)
	Capacity* 2000t/h (1)	Year of manufacture* 2012 (1)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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	

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Item of Equipment: 3 – Dozers (2)		
Equipment Information	Name of manufacturer	Model and power rating
	Caterpillar (1) Caterpillar (2)	D5K2 – 104HP (1) D6R – 189HP (2)
	Capacity*	Year of manufacture*
	n/a (1) n/a (2)	2013 (1) 1998 (2)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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	

Item of Equipment: 4 – Loaders (2)		
Equipment Information	Name of manufacturer	Model and power rating
	Caterpillar (1)	950G – 197HP (1)
	Caterpillar (2)	938G – 158HP (2)
	Caterpillar (3)	928G – 143HP (3)
	Caterpillar (4)	914G – 96HP (4)
	Caterpillar (5)	IT24F – 105HP (5)
	Capacity*	Year of manufacture*
	5.0 CY (1)	1998 (1)
	3.5 CY (2)	2000 (2)
	3.5 CY (3)	2001 (3)
	3.5 CY (4)	2011 (4)
	3.5 CY (5)	1999 (5)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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	

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Item of Equipment: 5 – Excavators (2)		
Equipment Information	Name of manufacturer Caterpillar (1) Caterpillar (2) Caterpillar (3) Caterpillar (4) Caterpillar (5) Caterpillar (6)	Model and power rating 349E – 432HP (1) 349F – 432HP (2) 312E – 95HP (3) 320EL – 153HP (4) 329EL – 216HP (5) 345B – 290HP (6)
	Capacity* 5.0CY (1) 5.0CY (2) 5.0CY (3) 5.0CY (4) 5.0CY (5) 5.0CY (6)	Year of manufacture* 2013 (1) 2015 (2) 2008 (3) 2012 (4) 2013 (5) 2004 (6)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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	

Item of Equipment: 6 - Graders (2)		
Equipment Information	Name of manufacturer	Model and power rating
	John Deere - Owned (1) Caterpillar - Rented (2)	672D - 185HP (1) 140G - 150HP (2)
	Capacity*	Year of manufacture*
	n/a (1) n/a (2)	2008 (1) 1992 (2)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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: David Kornelson	
	Address of owner: Spanish Lookout	
	Telephone: 610-0108	Contact name and title
	Fax	Telex
Agreements	Details of <u>rental</u> / lease / manufacture agreements specific to the project	

Item of Equipment: 7 - Bitumen Distributor (1)		
Equipment Information	Name of manufacturer International (1) International (2)	Model and power rating Rosco Maximizer (1) Rosco Maximizer (2)
	Capacity* 1950 gallons (1) 1950 gallons (2)	Year of manufacture* 2015 (1) 2005 (2)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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	

Item of Equipment: 8 – Rollers (2)		
Equipment Information	Name of manufacturer Caterpillar (1) Caterpillar (2) Caterpillar (3) Caterpillar (4) Caterpillar (5)	Model and power rating CS76 – 177HP (1) CS563C – 153HP (2) CS563E – 145HP (3) CS-563 – 145HP (4) CS-56B – 157HP (5)
	Capacity* n/a (1) n/a (1) n/a (3) n/a (4) n/a (5)	Year of manufacture* 2011 (1) 1999 (2) 2003 (3) 1999 (4) 2017 (5)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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	

Item of Equipment: 9 – Backhoes (2)		
Equipment Information	Name of manufacturer	Model and power rating
	Caterpillar (1) Caterpillar (2)	420E – 101HP (1) 420EST – 93HP (2)
	Capacity*	Year of manufacture*
	1.5CY (1) 1.5CY (1)	2007 (1) 2006 (2)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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	

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Item of Equipment: 10 - Dump Trucks (8)

Equipment Information	Name of manufacturer Caterpillar (1) Mack (2) Mack (3) Mack (4) Mack (5) Mack (6) Mack (7) Mack (8) Caterpillar (9) Mack (10) Mack (11) Mack (12) Mack (13)	Model and power rating 350E - 340HP (1) CH - 415HP (2) RD - 460HP (3) Granite - 405HP (4) RD - 460HP (5) RD - 350HP (6) RD - 485HP (7) CH - 427HP (8) 730 - 325HP (9) Granite - 405HP (10) Granite - 460HP (11) RD - 350HP (12) RD - 460HP (13)
	Capacity* 35CY (1) 15CY (2) 15CY (3) 15CY (4) 25CY (5) 15CY (6) 23CY (7) 15CY (8) 35CY (9) 15CY (10) 15CY (11) 15CY (12) 15CY (13)	Year of manufacture* 2000 (1) 2006 (2) 1994 (3) 2005 (4) 2002 (5) 2001 (6) 2003 (7) 1999 (8) 2003 (9) 2006 (10) 2005 (11) 2001 (12) 1994 (13)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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	

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Item of Equipment: 11 – Concrete Mixer Trucks (2)		
Equipment Information	Name of manufacturer Kenworth - Owned (1) International - Rented (2)	Model and power rating T800 – 350HP (1) Paystar 5000 – 370HP (2)
	Capacity* 11CY (1) 10CY (1)	Year of manufacture* 2001 (1) 1997 (2)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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: Menno Loewen	
	Address of owner: Spanish Lookout, Cayo	
	Telephone: 610-3206	Contact name and title Mr. Loewen
	Fax	Telex
Agreements	Details of <u>rental</u> / lease / manufacture agreements specific to the project	

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Item of Equipment: 12 – Concrete Manual Mixer (2)		
Equipment Information	Name of manufacturer	Model and power rating
	Multiquip Inc. (1) Honda (2)	Lifan – 6HP (1) Honda – 13HP (2)
	Capacity*	Year of manufacture*
	1 bag (1) 2 bags (1)	2018 (1) 2018 (2)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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		

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Item of Equipment: 13 – Mechanical Sweeper (1)		
Equipment Information	Name of manufacturer	Model and power rating
	Laymore (1) Laymore (2)	CH8 (1) CH8 (2)
	Capacity*	Year of manufacture*
	n/a (1) n/a (2)	2006 (1) 2009 (2)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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		

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Item of Equipment: 14 – Rubber Wheel Rollers (2)		
Equipment Information	Name of manufacturer Caterpillar (1) Caterpillar (2)	Model and power rating PF290B (1) PF200 (2)
	Capacity* n/a (1) n/a (1)	Year of manufacture* 2002 (1) 2008 (2)
Current Status	Current location: Spanish Lookout	
	Details of current commitments: None	
Source	Indicate source of the equipment <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	

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Summary					
Type	Manufacturer	Model	Power Rating	Capacity	Year
Backhoe	Caterpillar	420E	101 HP	1.5 CY	2007
Backhoe	Caterpillar	420EST	93 HP	1.5 CY	2006
Bitumen Distributor	International	Rosco Maximizer		1949 GL	2005
Bitumen Distributor	International	Rosco Maximizer		1950 GL	2015
Broom Skid Steer	Carolina Attachements	Skid Steer Sweeper			2015
Broom Tractor	Laymore	CH8	24.8 HP		2011
Bucket 48 In BKT34548 (Excavator)	Caterpillar	34548BKT			
Bulldozer	Caterpillar	D5K2	104 HP		2013
Compactor	Caterpillar	CS563C	153 HP		1999
Concrete Truck	Kenworth	T800	350 HP	11 CY	2001
Crushing Equipment	902 Power Screen	Maxtrak	400HP	2000t/h	2012
Crushing Equipment	903 Conveyor				
Crushing Equipment	905 Power Screen				
Crushing Equipment	906 Power Screen				
Dozer	Caterpillar	D6R	189 HP		1998
Dozer	Caterpillar	D5K2	104 HP		2013
Dump Truck	Mack	RD	460 HP	15 CY	1994
Dump Truck	Mack	RD	460 HP	15 CY	1994
Dump Truck	Mack	CH	427 HP	15 CY	1999
Dump Truck	Caterpillar	D350E	340HP	35 CY	2000
Dump Truck	Mack	RD	350 HP	15 CY	2001
Dump Truck	Mack	RD	350 HP	15 CY	2001
Dump Truck	Mack	RD	460 HP	25 CY	2002
Dump Truck	Mack	RD	485 HP	23 CY	2003
Dump Truck	Caterpillar	730	325 HP	35 CY	2003
Dump Truck	Mack	Granite	405 HP	15 CY	2005
Dump Truck	Mack	Granite	460 HP	15 CY	2005
Dump Truck	Mack	CH	415 HP	15 CY	2006
Dump Truck	Mack	Granite	405 HP	15 CY	2006
Excavator	Caterpillar	312EL	95 HP	.9 CY	2008

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Summary					
Type	Manufacturer	Model	Power Rating	Capacity	Year
Excavator	Caterpillar	320EL	153 HP	3 CY	2012
Excavator	Caterpillar	329EL	216 HP	3.5 CY	2013
Excavator	Caterpillar	345E	290 HP	5 CY	2004
Excavator	Caterpillar	349E	432 HP	5 CY	2013
Excavator	Caterpillar	349F	432 HP	5 CY	2015
Grader	John Deere	672D	165 HP		2008
Loader	Caterpillar	938G	158 HP	3.5 CY	2000
Loader	Caterpillar	928G	143 HP	3.5 CY	2001
Loader	Caterpillar	914G	96 HP	1.9 CY	2011
Loader	Caterpillar	950G	197 HP	5 CY	1998
Loader	Caterpillar	IT24F	109 HP	2 CY	1999
Painter	MRL	Mini Mac 400			2016
Painter Truck	Ford	F450			2004
Pickup Truck	Ford	F450			2001
Pneumatic Tyre Roller (PTR)	Caterpillar	PF290B	103 HP		2002
Pneumatic Tyre Roller (PTR)	Caterpillar	PF200			2008
Road Spreader	ROSCO	SPR-H		23 CY	2009
Rock Truck	Caterpillar	CAT 730			1998
Roller	Caterpillar	CS-76	177 HP		2011
Roller	Caterpillar	CS-563C	153 HP		1999
Roller	Caterpillar	CS563E	145 HP		2003
Roller	Caterpillar	CS-56B	157 HP		2017
Roller	Caterpillar	CS-563	145 HP		1999
Sand/Coarse Washer	TRIO	Washer	22 KW	100t/h	2003
Sand/Coarse Washer	TRIO	Washer	22 KW	100t/h	2016
Semi Kenworth	Kenworth	T800			2000
Skid Steer	Caterpillar	Skidsteer 262			2004
Skid Steer	Caterpillar	Skidsteer 272C			2007
Sweeper	Laymore	CH8			2006
Sweeper	Laymore	CH8			2009

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Summary					
Type	Manufacturer	Model	Power Rating	Capacity	Year
Telehandler	New Holland				2003
Utility Truck	Ford	F450			2004
Water Truck	Mack				1979
Water Truck	Mack	R690ST			1988
Water Truck	Peterbilt				1994

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Personnel

From Section III Personnel, the Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

No.	Position	Total Work Experience (years)	In Similar Works Experience (years)
1	Project Manager	15	10
2	Alternate	10	8
3	Construction Manager	10	7
4	Alternate	8	5
5	Quality Control Manager	10	8

Form PER-1: Proposed Personnel

No.	
1	Title of position: Project Manager
	Name: Francisco M. Gonzalez (21 year's work experience and 14 of these in similar works experience)
2	Title of position: Alternate Project Manager
	Name: Julio Cesar Chia (12 year's work experience and 8 of those in similar works experience)
3	Title of position: Construction Manager
	Name: Norman Reimer (31 year's work experience and same in similar works experience)
4	Title of position: Alternate Construction Manager
	Name: Franz Elias (16 year's work experience and same in similar works experience)
5	Title of position: Quality Control Manager
	Name: Orson Butler (22 year's work experience and 14 of those in similar works experience)

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Form PER-2: Resume of Proposed Personnel

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Name of Bidder: A&N Construction		
Position: Project Manager		
Personnel Information	Name: Francisco M. Gonzalez	Date of Birth: 21 August 1974
	Professional Qualifications: Bachelor and Master of Science in Civil Engineering	
Present Employment	Name of Employer: A&N Constructions	
	Address of Employer: Route 20 East, Spanish Lookout, Cayo, Belize, Central America	
	Telephone: (501) 610-1657	Contact (manager / personnel officer): Director
	Fax: (501) 823-0016	E-mail: constructionan@yahoo.com
	Job Title: Project Manager	Years with Present Employer: 1.5 years
Summarize professional experience over the last 15 years in reverse chronological order. Indicate particular technical and managerial experience relevant to the project		
From	To	Company/Project/Position/Relevant Technical and managerial Experience
2018	Present	A&N Construction / Hummingbird Highway Rehabilitation Project / Project Manager / Road Construction associated technical and managerial activities such as ensuring project remains on time and budget, liaison between the project team and upper level management as well as the supervision consultants; prepare and present progress reports; delegate project tasks to other staff members; track project performance; and other duties assigned.
2015	2018	Belize Water Services Limited / Belmopan Sewerage Expansion Project / Consulting Engineer / Sewer and Road Construction associated technical and managerial activities such as supervising the planning, coordination, supervision, and implementation of the construction project; ensure the project adhere to plans, specifications, and safety; supervising staff; reporting to BWS's Technical Services Manager; and other duties assigned.
2012	2013	Social Investment Fund / Various Road Projects in Corozal, San Ignacio, Orange Walk, and Belmopan / Project Engineer / Road Construction associated technical and managerial activities such as supervising the planning, coordination, supervision, and implementation of the construction project; ensure the project adhere to plans, specifications, and safety; supervising staff; reporting to SIF's Project Manager; and other duties assigned.
2009	2012	City of Doral / Various Transportation Projects in Miami, Florida, USA / Transportation Engineer / Road Construction associated technical and managerial activities such as supervising the planning, coordination, supervision, and implementation of the construction project; ensure the project adhere to plans, specifications, and safety; supervising staff; reporting to Doral's Public Works Director; and other duties assigned.
2006	2007	Fandrei Consulting Inc / Various Transportation Projects in Miami, Florida, USA / Engineer / Road Construction associated technical and

		managerial activities such as preparing construction drawings which included pavement markings, signage and traffic signal plans; and other duties assigned.
2001	2004	Burrell-Burrell Associates in conjunction with Halcrow Group Limited / Belize City Development Limits Southside Canal, Belize Municipal Drainage & Hurricane Preparedness Project in Corozal, Orange Walk, and Belize City / Assistant Resident Engineer / Drainage & Road Construction associated technical and managerial activities such as supervising the planning, coordination, supervision, and implementation of the construction project; ensure the project adhere to plans, specifications, and safety; supervising staff; reporting to Halcrow's Project Manager; and other duties assigned.
1999	1999	Secretaria de Comunicaciones y Transportes (SCT) / Various Road Rehabilitation Projects / Project Engineer / Road Construction associated technical and managerial activities such as supervising the planning, coordination, supervision, and implementation of the construction project; ensure the project adhere to plans, specifications, and safety; reporting to the Resident Engineer; and other duties assigned.

NR



Route 20 East
Spanish Lookout, Cayo
Belize

1st June 2019

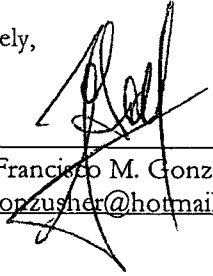
Mr. Edgar E. Puga
Project Execution Unit
Ministry of Works
Power Lane, Belmopan, Cayo
Belize, C. A.

Re: Upgrading of Caracol Road Project Lot 1 Contract 143
Subject: Technical Staff Letter of Acceptance

Dear Sir:

I, Francisco Miguel Gonzalez, accept to support A&N Construction in the bid for the referenced project. In case of obtaining the contract., I agree to collaborate with A&N Construction during the duration of the project.

Sincerely,



Mr. Francisco M. Gonzalez, P. Eng.
E: fgonzusher@hotmail.com P: (501) 636-9544

NR

Francisco M. Gonzalez
BSCE/MSCE
Civil Engineer



fgonzusher@hotmail.com
(501) 636-9544
New Nazarene Area,
Benque Viejo del Carmen, Cayo
Belize, Central America

SUMMARY

With over 20 years of extensive field work and office technical expertise and experience in design, procurement, and supervision management of roads, buildings, and wastewater including detailed engineering design with national and international contractors and consulting firms in Mexico, Belize and the United States of America. I am a highly motivated civil engineer with eighteen years' experience in the civil engineering industry. I am detailed-oriented with extensive experience working with a variety of building systems and materials. I have planned, developed, designed, and implemented structural drawings for residential, commercial, institutional, and infrastructure projects and facilities such as buildings, pedestrian and vehicular bridges, retaining walls, pools, and drains.

Transportation Engineering:

Six (2006 to 2012) years of experience carrying out and reviewing various transportation studies for private and public entities such as developers, local, county, and state agencies utilizing software such as CORSIM, Synchro and HCS+.

Civil & Structural Engineering:

Over 20 (1999 to present) years of experience in conducting engineering design and supervision in the areas of structures, civil, roads, and drainage. In addition, familiar with the production of contract documents.

Project Management and Civil Engineering Inspections:

Over 13 (2000 to 2004 & 2012 to present) years of experience with international consultant Halcrow, Belize Social Investment Fund, Belize Water Services limited with project funded by World Bank, Inter-American Development Bank in supervising drainage, roadway, wastewater projects with local and international contractors, with a focus on maintaining quality control.

Computer Skills:

Experience using ArcGIS, AutoCAD; AutoCIVIL, AutoTURN, EaglePoint, MOSS, Civil 3D (programs for processing surveying data and design of highways); SAP, ETABS, Frame2D and Truss2D (structural analysis programs); iSIS (Open Channel Flow analysis program); CORSIM, Synchro/SimTraffic, Highway Capacity Software (HCS), TT_PP (traffic analysis software); SewerCAD & WaterCAD; as well as general word processing and spreadsheet software.

Surveying:

Experience levelling, setting out, and conducting topographical surveys using automatic level, theodolite, and total station.

EDUCATIONAL AND PROFESSIONAL STATUS

- Master of Science, **Civil Engineering**, Florida International University (FIU), Miami, Florida, United States of America, 2006
- Bachelor of Science, Civil Engineering, Autonomous University of Yucatan (UADY), Merida, Yucatan, Mexico, 1999
- Associate Degree in Science, Mathematics, Preparatory No.1, Merida, Yucatan, Mexico, 1194
- Registered Engineer, Association of Professional Engineers of Belize (APEB), 2001
- Licensed Engineer, Secretaria de Educación Pública, México, 2002.

EXPERIENCE RECORD

Project Manager, Hummingbird Highway Rehabilitation Project, 2018 -present

- Project worked on involved Addendums 5, 6, and 7 to the original contract; work involved over 23km of road with resurfacing of over 10,000m² chip seal, surfacing over approximately 56,000m² of new road including culvert and bridge construction, concrete and HDPE pipe culvert installations, road markings, signage and ancillary items with a value over BZ\$27million.
- Main responsibilities included but not limited to: managing, checking, and directing the project; preparing interim payment certificates; implementing technical knowledge in the field to prepare work procedures; preparing work program and updating the same; assisting construction manager to ensure efficient flow of work; verify and apply the general and particular conditions of the contract along with drawings, specifications, and bill of quantities to ensure the job is done in the most economical way; prepare construction methodology for variation orders in conjunction with unit price analysis and priced bill of quantities for the work; liaise with public utilities to resolve conflicts with road route; utilized contractual and technical obligations to mitigate conflicts and following up with necessary actions; preparing shop drawings; any other duties assigned
- Redesign of portions of road alignment and culverts.

Consultant, Various Projects, Belize, 2013 - present

- Familiar with procurement documents for IDB and World Bank.
- Observed building material, quality, and construction types for rehabilitation purposes for NEMO Storm Shelters.
- Perform structural design and drawings for residential dwellings including use of wood, concrete and steel; pools including use of masonry, concrete and steel; retaining walls; in addition to river walls, generator buildings, churches, warehouses, offices, houses, culverts, small bridges, sheds, gas station canopy, cold formed steel roofs, retaining walls, apartments, etc.; in association with architects
- Belize Water Services Limited (BWS): prepared engineering drawings and bill of quantities. Responsible for structural design and modification including seismic/earthquake and wind/hurricane design.
- Develop remodelling, additions, and repairs of structural wood, concrete and steel building elements.
- Supervise civil works to ensure they conform to drawings, specifications, and bill of quantities.

Consulting Engineer, Belmopan Sewerage Expansion Project, Belize Water Services (BWS) Limited in association with the Inter-American development Bank, 2015 – 2018

- Project financed by Inter-American Development Bank (IDB)/ Caribbean Regional Fund for Wastewater Management (CRW), BWS and Government of Belize (GoB)
- Phase 1 & 2 of the project involved the supervision of construction of a pumping/lift station, installation of force and gravity sewer mains and construction of manholes, installation of a UV system, construction of an anaerobic pond, including relocation of existing water mains, repaving of roads with chip seal, modification of culverts, appurtenances, preparatory and ancillary works. Phase 2 included design, bid, and supervising installation of gravity sewer mains and manholes, rehabilitation of sewer mains, and upgrade to wastewater treatment plant (roads, refurbishment of operators' quarter, site lighting, PV systems, RC culverts, etc.).
- Additional duties included supervision of five BWS personnel who design, bid, and supervise construction of building such as warehouse, residential building, offices, generator buildings, a 500k USG Underground Water Reservoir, and staff residential housing, installation of Photovoltaic systems, in addition to erection of fences and facilities maintenance such as Air Conditioning, electrical aesthetic and routine maintenance.
- Served on the safety committee.

Engineer, Various Roadway Projects, Social Investment Fund, Belmopan in association with the World Bank, Cayo, Belize, 2012 – 2013

- Responsible for review of project drawings for general compliance with standard industry standards.
- Responsible for managing chip seal road and hot mix asphalt construction projects with strong focus on cost management and managing consultants as well as contractors and sub-contractors and all other project administration including safety and quality assurance.
- Oversee all on-site activity to ensure projects are completed on schedule, within budget, and in accordance with standard industry engineering design.
- Coordinate and communicate with clients/municipalities, contractors, sub-contractors and supervision consultant.
- Estimated and created budgets for construction projects.
- Reviewed engineering drawings and other related engineering documents to identify potential problems retroactively and proactively as well as implementing solutions.
- Took corrective action as needed during projects and/or consulted with contractors and supervising consultant to resolve issues arising during construction.
- Coordinated proposed changes in design with consultants and contractor while managing schedule and budget.
- Reviewed, recommended, and approved all construction changes requests, on-site change orders, and pay requests.

Transportation Engineer, Various Transportation and City Right-of-Way projects, City of Doral, Florida, USA

- Responsible of managing the Doral Trolley.
- Responsible of grant writing and follow through.
- Responsible for Traffic Impact Reviews.
- Responsible for RFPs for road projects and the Doral Trolley.
- Responsible for all traffic related incidents within City and reporting to Miami-Dade County.
- Responsible for road maintenance program including review of pavement marking, signage and signalization design drawings.
- Responsible for the production of AutoCAD/AutoTURN and ArcGIS drawings.
- Projects included repaving and restriping of city streets, installation of traffic lights and signs, construction of new portions of road with hot mix asphalt and installation of new interconnected storm water drains

Traffic Engineer, Various traffic impact studies, The Corradino Group, Miami, Florida, USA, 2007 – 2009

- Performed traffic impact/concurrency analysis review for the City of Doral, Village of El Portal and the Village of Palmetto Bay
- Carried out review of Transportation Element for local agency Comprehensive Plan Evaluation and Appraisal Report (EAR) of Comprehensive Growth Management Plans.
- Carried out traffic studies for Developments of Regional Impacts (DRI).
- Worked in conjunction with planning department on transportation master plans.
- Carried out studies of interchanges using CORSIM and Synchro as well as HSC+.
- Carried our studies such as Transportation Master Plan for the City of Doral, Bird Avenue Access Management, and Traffic Calming Studies for the Village of Palmetto Bay including traffic calming measures and intersection improvements design.
- Carried out Synchro/SimTraffic modelling for Florida Department of Transportation (FDOT) for interchange improvements and interstate widening.
- Responsible for production of reports.

Engineer, Various Traffic Impact Studies, Fandrei Consulting Inc., Miami, Florida, USA, 2006 – 2007

- Performed analysis of intersections and roadways.
- Responsible for the production of pavement marking, signage and signalization plans.
- Responsible for production and compilation of impact analysis report.

Assistant Resident Engineer, Belize Municipal Drainage Project, Burrell-Burrell Associates (with Halcrow Group Limited), Corozal, and Orange Walk Towns, Belize, 2003 – 2004

- Construction supervision of major drainage improvements on a daily basis, with a total works value of US\$1.1 million.
- Supervised all aspects of civil works that included lined and unlined canal works, culvert works, street repaving, and ancillary works.
- Played a key role in cost control, evaluation of contractor's interim payments, variation orders, project disputes, and safety.

Assistant Resident Engineer, Hurricane Preparedness Project, Burrell-Burrell Associates (with Halcrow Group Limited), Belize City, Belize, 2002 – 2003

- Construction supervision of major drainage project improvements on a daily basis, with a capital works value of US\$4.45 million including chip seal repaving work.
- Supervised all aspects of the civil works that included lined and unlined canal works, bridge works, and ancillary piling works.
- Liaised with utility companies and played a key role in site safety.

Project Engineer, Belize City Development Limits, Southside Canals, Burrell-Burrell Associates (with Halcrow Group Limited), Belize City, Belize, 2001

- Design project to extend the drainage network into city areas vulnerable to regular flooding but with no drainage provision, with estimated value of works of US\$5 million.
- Compiled design drawings and contract documents for civil works comprising 6km of lined covered canals and 3km of unlined canals alongside city streets.
- Gained hands-on experience using iSIS, Halcrow's specialist software for hydraulic analysis.

Project Engineer, Hurricane Preparedness Project, Burrell-Burrell Associates (with Halcrow Group Limited), Belize City, Belize, 2000

- Design project for major drainage improvements in Belize City, focusing on developing areas in city area known as Southside, with a civil works value of US\$4 million.
- Responsible for compilation of general design drawings and contract documents for civil works comprising 3km of lined covered canals and 5km of unlined canals.
- Gained hands-on experience using iSIS, Halcrow's specialist software for hydraulic analysis.
- Assisted in the structural design of timber footbridges and reinforced block work canals.

Assistant Project Engineer, Orange Walk Bypass, Burrell-Burrell Associates (with Halcrow Group Limited), Belize City, Belize, 1999

- Design of 8km of double lane highway to bypass the town of Orange Walk. Works included the design of two major pre-stressed concrete bridges with an estimated value of US\$8 million.
- Responsible for the production of contract drawing with the aid of AutoCAD, project drawings included street paving, culverts, junctions, plan, and profiles of the proposed highway.
- Assisted with the design of highway alignment and drainage.

Project/Design Engineer, Various Civil Engineering Projects, Burrell-Burrell Associates, Belize City, Belize, 1999 – 2004

- Complete project documents including civil and structural drawings for gas stations, butane stations, hospitals, clinics, residential homes, etc.; structures include reinforced concrete retaining walls, culverts, beams, columns, slabs, anchoring of tanks below water table, etc. inclusive of the rehabilitation of the Karl Heusner Memorial Hospital.
- Conducted complete structural analysis/design, revised technical specifications, drew structural drawings, and produced bill of quantities, preambles, etc pertaining to contract documents.

Engineering Technician, Various Civil Engineering and Surveying Projects, Instituto para la Construcción, Equipamiento, Mantenimiento y Rehabilitación de las Escuelas del Estado de Yucatán (ICEMAREY), Merida, Yucatan, Mexico, 1999

- Projects included surveys for the improvement of existing schools and the design of new schools.
- Interviewed with directors of specific schools to satisfy the needs of these within the budget available;
- Conducted topographical surveys;
- Prepared contract drawings and scale models
- Prepared contract documents made available for public bidding

Supervisor of Programs and Projects, Various Highway Rehabilitation Projects, Secretaria de Comunicaciones y Trasportes (SCT), Merida, Yucatan, Mexico, 1999

- Projects included the rehabilitation of over 150km of hot mix asphalt roadways in Yucatan.
- Surveyed for the improvement required of existing highways.
- Prepared projects made available for public bidding
- Drew road marking at specific locations
- Performed analysis of tenders and cost analysis
- Supervised and monitored works from inception to completion, with a focus on quality

Surveyor, Old Road to Motul, Fablosa, S.A. de C.V., Merida, Yucatan, Mexico, 1998

- Project consisted of the upgrading of 5km of an existing road to create a four-lane avenue with a central median.
- Set out of the proposed vertical and horizontal alignment using theodolite, tape, and automatic level.

Engineering Technician, University of Yucatan, Merida, Yucatan, Mexico, 1998

- Aid in the design of columns, beams and footings (Montecristo Church);
- Visual inspection of pre-used erected tapered steel columns and preparation of report (Merida City Jail);
- Analysis of structural failures using SAP90 and preparation of drawings and reports (Rehabilitation of Cine Merida)

Hydrology Department:

- Study of the flow direction of polluted water in the aquifer below municipal dump to determine the extents of contamination and the safe location for drinking water.
- Conducted topographical survey of dump site with the total station and determined water levels and took water samples for later analysis.

Topography Department:

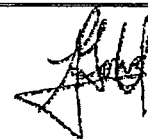
- Provided assistance to practical classes;
- Elaborated didactical material for theoretical classes;
- Conducted constant bibliographical revisions to improve classes and carried out related topographical tasks that were assigned.

ADDITIONAL EXPERIENCE

English Teacher, English as a Second Language, Benjamin Franklin Institute, Merida, Yucatan, Mexico, 1994 - 1999

LANGUAGE ABILITY

Fluent: English/Spanish



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Name of Bidder: A&N Construction		
Position: Alternate Project Manager		
Personnel Information	Name: Julio Chia	Date of Birth: 3 May 1982
	Professional Qualifications: Bachelor of Science in Civil Engineering	
Present Employment	Name of Employer: iMC Worldwide	
	Address of Employer: Lot 5113 Doyle's Delight, East Piccinni Area, Belmopan, Belize	
	Telephone: 607-6769	Contact (manager / personnel officer): Andrew Clough
	Fax: 802-1749	E-mail: andrew.clough@imcworldwide.com
	Job Title: Resident Engineer	Years with Present Employer: 1.5
Summarize professional experience over the last 10 years in reverse chronological order. Indicate particular technical and managerial experience relevant to the project		
From	To	Company/Project/Position/Relevant Technical and managerial Experience
2018	Present	iMC Worldwide / George Price Highway Rehabilitation Project / Resident Engineer / Road Supervision associated technical and managerial activities such as establishing and maintaining project records; distributing project documents, preparing supplemental design drawings in AutoCAD; monitoring daily reports of site engineers; perform quantity take-off and prepare variation orders for contractor's pricing; coordinate and communicate effectively and clearly with team, contractor and client; and other duties assigned.
2016	2018	A&N Construction / Hummingbird Highway Rehabilitation Project / Project Manager / Road Construction associated technical and managerial activities such as ensuring project remains on time and budget, liaison between the project team and upper level management as well as the supervision consultants; prepare and present progress reports; delegate project tasks to other staff members; track project performance; and other duties assigned.
2015	2016	Imer Hernandez Development Company Limited / Municipal Development Project (paving of Cahal Pech, Martin Galvez and Bishop streets in San Ignacio/Santa Elena, Cayo / Construction Engineer / Road Construction associated technical and managerial activities such as planning of construction project; overseeing construction; providing information to pertinent parties; produce reports; compiling testing carried out; providing technical advice to all project parties; and other duties assigned.
2014	2015	Imer Hernandez Development Company Limited / Municipal Development Project (paving of Cahal Pech, Martin Galvez and Bishop streets in San Ignacio/Santa Elena, Cayo / Construction Engineer / Road Construction associated technical and managerial activities such as planning of construction project; overseeing construction; providing information to pertinent parties; produce reports; compiling testing

		carried out; providing technical advice to all project parties; and other duties assigned.
2012	2014	Lopez Equipment Company / Sugar Roads Project Lot A Phase 2 / Construction Engineer / Road Construction associated technical and managerial activities such as planning of construction project; overseeing construction; providing information to pertinent parties; produce reports; compiling testing carried out; providing technical advice to all project parties; and other duties assigned.
2011	2012	Lopez Equipment Company / Trial Farm Drainage Project / Construction Engineer / Road Construction associated technical and managerial activities such as planning of construction project; overseeing construction; providing information to pertinent parties; produce reports; compiling testing carried out; providing technical advice to all project parties; and other duties assigned.
2011	2010	Lopez Equipment Company / Paving and Infrastructure Works Clarke Street in Orange Walk Town / Construction Engineer / Road Construction associated technical and managerial activities such as planning of construction project; overseeing construction; providing information to pertinent parties; produce reports; compiling testing carried out; providing technical advice to all project parties; and other duties assigned.
2010	2010	Imer Hernandez Development Company Limited / Access Road to Mile 24 Regional Sanitary Access Landfill / Surveyor / Road Construction associated technical and managerial activities such as ensuring setting out of vertical and horizontal alignment; and other duties assigned.



Route 20 East
Spanish Lookout, Cayo
Belize

1st June 2019

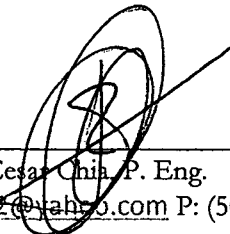
Mr. Edgar E. Puga
Project Execution Unit
Ministry of Works
Power Lane, Belmopan, Cayo
Belize, C. A.

Re: Upgrading of Caracol Road Project Lot 1 Contract 1¹³
Subject: Technical Staff Letter of Acceptance

Dear Sir:

I, Julio Cesar Chia, accept to support A&N Construction in the bid for the referenced project. In case of obtaining the contract, I agree to collaborate with A&N Construction during the duration of the project.

Sincerely,



Mr. Julio Cesar Chia, P. Eng.
E: jcchia82@yahoo.com P: (501) 610-2302

AR

Position Title and No.: Resident Engineer
 Name of Expert: Julio Chia
 Date of Birth: 03rd May 1982
 Country of Citizenship/Residence: Belize

Education:

School, College and/or University Attended:	Degree/certificate or other specialized education obtained	Date Obtained
Universidad de Oriente (ISJAM) - Cuba	Post-graduate Course in Disaster Preparedness	April 2008
Universidad de Oriente (ISJAM) - Cuba	Post-graduate Course in Seismic Engineering	November 2007
Universidad de Oriente (ISJAM) - Cuba	Degree in Civil Engineering "Golden Honors"	July 2006

Employment Record relevant to the assignment

Period	Employing Organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Assignment
February 2018 to Present	<i>iMC Worldwide</i> Position held: Resident Engineer References: Mr. Derick Calles, Project Manager +501-669-0104	Belize	Ensure compliance with the drawings, technical specifications and generally all stipulations contained in the Contract Documents. Monitor and report on progress in order to achieve completion of the construction work within stipulated time limit. Provide assistance to the PEU in the overall implementation of the project through the rendering of appropriate advice. Give advice regarding problems and design issues arising during project execution including amendment to designs of the Roaring Creek Bridge and George Price Highway design. Measure the quantities of works executed and review Interim payment certificates submitted by contractor. Preparation of monthly reports.
January 2016 – January 2018	<i>A&N Construction Co. Ltd.</i> Position held: Project Manager/Resident Engineer References: Frank Elias, Manager constructionfe@yahoo.com Mobile: +5016151657	Belize	Cost and Quantity management Setting up of the estimates, the budgets and develops the construction strategy Time management Preparing weekly and monthly work programmes. Preparing financial reports and Interim Payment Certificates Quality Control and Assurance of the construction Contract administration Manage the logistics of the project Management and administration of recourses and distributed of labour force.
July 2014 to January 2016 November 2011 to January 2012	<i>Imer Hernandez Development Company Ltd</i> Position held: Site/Resident Engineer References: Omir Vega, Head Engineer omirvega@hotmail.com Mobile: +5016103321	Belize	Design Modifications to the drainage and vertical alignment of streets. Daily supervision of works Manage the logistics of the project Quality Control and Assurance of the construction Management and administration of recourses and distributed of labour force. Supervising the topographical setting out of works.
June 2012 to July 2014	<i>Lopez Equipment Co.</i> Position held: Project Manager/Resident Engineer References: Wilhelm Lopez wilhelm@lopezequipment.bz Mobile: +5016103203	Belize	Structural Design and all necessary Civil works design for infrastructures being constructed. Supervision of Construction Works Supervision of dredging works Supervision of earth works and construction of all necessary infrastructures.
July 2010 to November 2011	Pickwick Hotel and Casino and the Benque Viejo Free Zone Infrastructure Ltd.	Belize	Project management and Procurement. Supervision of Construction and infrastructure works

Period	Employing Organization and your title/position- Contact information for references	Country	Summary of activities performed relevant to the Assignment
	Position held: Assistant Project Manager/Resident Engineer References: Sunjay Hotchandani, Manager <u>shotchandani@gmail.com</u> Mobile:+5016104789		
February 2009 to July 2010	M&M Engineering Consultants Ltd Position held: Design and Resident Engineer References: Roque Matus, Owner <u>roquermatus@yahoo.com</u> Mobile:+5016104789	Belize	Structural Design Supervision of Construction Works
August 2006 to January 2007	<u>University of Oriente Santiago de Cuba</u> Position held: Representative Engineer in the Department of investors References: Kira Bueno, Head of civil Engineering Department <u>kira@fco.uo.edu.cu</u>	Cuba	Supervision of Construction Works Quality control and project management

Membership in Professional Associations and Publications:

Association of Professional Engineers of Belize (2012 to present)

“UNAICC” Union Nacional de Arquitectos e Ingenieros de la Construction de Cuba (2006 to 2008)

Publication: “Vulnerabilidad Sismica de 26 Edeficos Del Sistema Constructivo Giron en la Universidad the Oriente”

Language Skills (indicate only languages in which you can work)::

	Speaking	Reading	Writing
English:	Fluent	Fluent	Fluent
Spanish	Excellent	Excellent	Excellent

Adequacy for the Assignment:

Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks
<p>Name of assignment: George Price Highway Rehabilitation Project Year: 02/2018 to Present Location: Belize Client: Government of Belize Position held: Resident Engineer</p> <p>Main project features: The project aims to improve the road connectivity within Belize’s main districts and with Central America by rehabilitating the George Price Highway road infrastructure between miles 47.9 in Belmopan and 67.3 in Santa Elena to national standards, decreasing travel time and costs, reducing road fatalities and injuries, and ensuring road accessibility by improving the corridor’s climate change resilience.</p> <p>Activities performed:</p> <ul style="list-style-type: none"> • Ensure compliance with the drawings, technical specifications and generally all stipulations contained in the Contract Documents. • Monitor and report on progress in order to achieve completion of the construction work within stipulated time limit. • Provide assistance to the PEU in the overall implementation of the project through the rendering of appropriate advice. • Give advice regarding problems and design issues arising during project execution including amendment to designs of the Roaring Creek Bridge and George Price Highway design. • Measure the quantities of works executed and review Interim payment certificates submitted by contractor. • Preparation of monthly reports.
<p>Name of assignment: Rehabilitation of Hummingbird Highway Project-----Section-1 Belmopan Roundabout to Sibun Bridge and Section 4, Alta Vista Citrus Factory to Dangriga Entrance (Kuwait fund) Year: 01/2016 – 01/2018 Location: Belize Client: Ministry of Works, Government of Belize Position held: Resident Engineer/ Project Manager</p> <p>Main project features: Rehabilitation of Hummingbird Highway by road widening, Resurfacing of existing highway scarifying and repair of damaged/road failure areas, addressing drainage issues and changing of one lane bridge in Alta vista with a box culvert to allow for two lane traffic, Installation of Road Furniture including both no limited to (Roads Signs, Thermoplastic Road Marking, Road Studs, Safety Barriers, Pedestrian crossing, Edge market Post, etc.)</p>

AR

Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks

Activities performed:

- Represented the Contractor and chaired all monthly meetings.
- Provided advice on the management of the project by implementing time saving strategies and efficiency plans.
- Organised and controlled the key personnel working on the project.
- Made sure that all the goals and project milestones were accomplished in a cost efficient manner.
- Responsible for reviewing the performance of subcontractors to assure contract compliance, the application of accepted construction technology and standards.
- Supervise the construction, engineering tasks and provide technical expertise on the construction to ensure compliance with British Standards and technical specifications..
- Ensured that tests and inspections are performed, witnessed, and documented in accordance with approved procedures.
- Developed discipline construction schedules and monitored progress to ensure a timely completion.
- Management and administration of recourses and distributed of labour force.
- Made sure that the construction materials meet the requirements of the specifications and the designs.
- Calculate the quantity of material, supplies and equipment needed for each individual project task.
- Provide technical advice to field staff in order to ensure that construction procedures are being carried out properly.
- Conferred with supervisors and other managers the construction progress, including worker productivity and compliance with Road and safety codes.
- Resolved problems due to inclement weather, emergencies or other issues that may cause delays.
- Developed Monthly Progress Report, including but not limited to financial status (S-curve), Work Program or Work Schedule, monthly update of contractor staff and equipment.
- Developed estimates, the budgets and implemented the most appropriate construction strategy for the project.
- Prepared monthly Interim Payment Certificates including quantities calculation and supporting documents.
- Managed the logistics of the project and administration of recourses and distributed of labour force.
- Conducted Contracts negotiations with Client, Supervision, Suppliers and other entities.
- In charge of the securing of permits and licenses and delivery of materials and equipment to construction sites.
- Developed shop drawings and working drawing to facilitated the progress of the project.
- Prepared documents for bid submission according to national and international founding agencies guidelines.

Name of assignment: SAN IGNACIO/SANTA ELENA - CAHAL PECH ST., MARTIN GALVEZ ST., BISHOP
Municipal Development Project **Year:** 08/2015 to 01/2016 **Location:** Belize **Client:** Social Investment Fund Belize **Position held:** Resident Engineer/Site Engineer

Main project features: Upgrading of Municipal streets and Improvement of Drainage.

Activities performed:

- Establish and maintain project engineering records, including, but not limited to Project schedule, daily logs and cost reports.
- Developed design Modifications to the drainage and vertical alignment of streets under the project to ensure proper evacuation of Storm water.
- Responsible for reviewing the performance of subcontractors to assure contract compliance, the application of accepted construction technology and standards, and the acceptable standardization of materials and supplies.
- Supervise the construction, engineering work and provide technical expertise on the construction.
- Ensured that tests and inspections are performed, witnessed, and documented in accordance with approved procedures.
- Developed disciplined construction schedules and monitored progress to ensure a timely completion.
- Management and administration of recourses and distributed of labour force.
- Make sure that the construction materials meet the requirements of the specifications and the designs.
- Calculate the quantity of material, supplies and equipment needed for each individual project
- Provide technical advice to field staff in order to ensure that construction procedures are being carried out properly.
- Chaired progress meetings and collaborated with contractor and client.
- Place an emphasis on safe construction practices (zero incident) and on maintaining a high quality of construction
- Provided supervision and instruction to site surveyors for the topographical setting out of works.
- Employed knowledge of World Bank bidding procedures, standards and guidelines to ensure that project was executed in a manner that was acceptable to the client.
- Developed as-built drawings after project completion.

Name of assignment: Rehabilitation of 7th Avenue Corozal Town Project (2 miles) **Year:** 07/2014 to 07/2015 **Location:** Belize
Client: Ministry of Works, Government of Belize **Position held:** Resident Engineer/Design/Site Engineer

Main project features: Design and construction of reinforce concrete paved running Surface

Activities performed:

- Designed and modified vertical and horizontal alignment of all the streets and drainages involved in the project

Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks

- Developed drawings and working drawing to facilitated the progress of the project
- Developed Monthly Progress Report, including but not limited to financial status (S-curve), Work Program or Work Schedule, monthly update of contractor staff and equipment.
- Conducted daily supervision of works to ensure all works were performed according to technical specifications.
- Managed and administered recourses and distributed labour force for the smooth operation and execution of the project.
- Responsible for all Quality Control and Assurance of the construction.
- Prepared monthly Interim Payment Certificates including quantities calculation and supporting documents.
- Supervised the setting out of works to ensure compliance with drawings.

Name of assignment: *Sugar Roads Project, Lot A phase 2(12km). And Lot B Phase 2 (24km) funded by EU* **Year:** 06/2012 to 07/2014 **Location:** Belize **Client:** Ministry of works, Government of Belize **Position held:** Resident Engineer/Site Engineer
Main project features: upgrade and construction of existing roads to all weather roads to include filling, paving, installation of Culverts and addressing drainage issues.

Activities performed:

- Conferred with supervisors or other managers the construction progress, including worker productivity and compliance with Road and safety codes.
- Ensure that a project is completed according to schedule,
- Resolve problems that arise due to inclement weather, emergencies or other issues that may cause delays.
- Development of Monthly Progress Report, including but not limited to financial status (S-curve), Work Program or Work Schedule, monthly update of contractor staff and equipment.
- Establish and maintain project engineering records, including, but not limited to Project schedule, daily logs and cost reports.
- Developed design Modifications to the drainage and vertical alignment of streets under the project to ensure proper evacuation of Storm water.
- Responsible for reviewing the performance of subcontractors to assure contract compliance, the application of accepted construction technology and standards, and the acceptable standardization of materials and supplies.
- Supervise the construction, engineering work and provide technical expertise on the construction to ensure compliance with British Standards and technical specifications..
- Ensured that tests and inspections are performed, witnessed, and documented in accordance with approved procedures.
- Developed discipline construction schedules and monitored progress to ensure a timely completion.
- Management and administration of recourses and distributed of labour force.
- Make sure that the construction materials meet the requirements of the specifications and the designs.
- Calculate the quantity of material, supplies and equipment needed for each individual project.
- Provide technical advice to field staff in order to ensure that construction procedures are being carried out properly.
- Chaired progress meetings and collaborated with contractor and client.
- Place an emphasis on safe construction practices (zero incident) and on maintaining a high quality of construction
- Provided supervision and instruction to site surveyors for the topographical setting out of works.
- Employed knowledge of EU bidding procedures, standards and guidelines to ensure that project was executed in a manner that was acceptable to the client.

Name of assignment: Trial Farm Drainage Project Phase 3 **Year:** 11/2011 to 01/2012 **Location:** Belize **Client:** Social Investment Fund Belize **Position held:** Resident /Site Engineer

Main project features: Lined Concrete drains and installation of culverts to improve drainage in flood prone areas

Activities performed:

- Conducted daily supervision of works to ensure all works were performed according to technical specifications.
- Conferred with supervisors or other managers the construction progress, including worker productivity and compliance with Road and safety codes.
- Managed the logistics of the project administration, recourses and distributed of labour force.
- Preparing monthly Interim Payment Certificates including quantities calculation and supporting documents
- Responsible for all Quality Control and Assurance of the construction.
- Proposed structural changes in the cross section that was implemented in the construction of the drainage system.

Name of assignment: Paving and infrastructure works in Clarke Street at Orange Walk Town **Year:** 11/2011 to 01/2012
Location: Belize **Client:** Gaspar Vega **Position held:** Resident /Site Engineer

Main project features: Upgrading and paving of existing road and construction of sidewalks

Activities performed:

- Conducted daily supervision of works to ensure all works were performed according to technical specifications.
- Managed the logistics of the project administration, recourses and distributed of labour force.

Name of assignment: Access Road to Mile 24 Regional Sanitary Landfill (funded by Inter-American Dev. Bank) **Year:**

Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks

02/2010 to 06/2010 **Location:** Belize **Client:** Imer Hernandez Development Co. Ltd. **Position held:** Surveyor/Consulting Engineer

Main project features: Construction of 3.5 km paved access road to sanitary landfill

Activities performed:

- Performed the setting out of vertical and horizontal alignment levels for the Access road and Day to day quality control level checks.
- Proposed solutions and construction strategies for areas with road failure.

Name of assignment: Various Private warehouses and Hotels under M&M Engineering Consultants **Year:** 02/2009 to 07/2010 **Location:** Belize **Client:** M&M Engineering Consultants **Position held:** Project Manager/Resident Engineer

Main project features: Design, Construction and supervision of prefabricated buildings.

Activities performed:

- Provide technical advice to field staff in order to ensure that construction procedures are being carried out properly.
- Developed various Structural Design of Buildings.
- Supervise the construction, engineering work and provide technical expertise on the construction to ensure compliance with British Standards and technical specifications.
- Ensured that tests and inspections are performed, witnessed, and documented in accordance with approved procedures.
- Developed discipline construction schedules and monitored progress to ensure a timely completion.
- Management and administration of resources and distribution of labour force.
- Make sure that the construction materials meet the requirements of the specifications and the designs.
- Calculate the quantity of material, supplies and equipment needed for each individual project.
- Determine project feasibility and direct all resources to the site in a time efficient manner
- Developed Project design and construction drawings for K Park Shopping Center.
- Developed structural design and bill of Quantities for Joseph & Taylor Ltd warehouse in Belize City.
- Developed a Proposed Design for eight story parking lot that was to be constructed on Regent Street.
- Designed and Supervised First set of Tilt up Wall buildings in Belize – Getu's Warehouse and Jack Charles' Warehouse.
- Conducted Day-to-day management of the sites, including supervising, monitoring the site labor force and reported on the work of all subcontractors.
- Performed Project management and onsite supervision for Shadarangani residence and office building located on Marine Parade.

Name of assignment: Seismic vulnerability studies and structural analysis for the cultural patrimony of Santiago de Cuba. **Year:** 01/2007 to 05/2007 **Location:** Cuba **Client:** *Conservadores de la Cuidada in Santiago, Cuba.* **Position held:** Consulting Engineer

Main project features: Conducted Seismic vulnerability studies and structural analysis for the cultural patrimony of Santiago de Cuba (some buildings over 300yrs old) to determine were vulnerable to a grade 7 earthquake.

Activities performed:

- Conducted Non-destructive and destructive test and recorded results and used results from test in the studies.
- Conducted physical inspection of the buildings in the area to determine construction material, construction type, and recorded visible structural damage.
- Used all information obtained from tests and inspections in study.
- Proposed solutions for buildings that would not resist to be able to mitigate possible damage and loss of life.
- Ensured that the solutions proposed did not compromise the colonial architecture.

Name of assignment: *Remodelling of the University of Oriente Santiago De Cuba* **Year:** 08/2006 to 01/2007 **Location:** Cuba **Client:** **Position held:** Resident Engineer/Site Engineer (Representative Engineer in the Department of investors)

Main project features: Supervision of the remodelling of several five story buildings, improvement to infrastructure around campus, installation of updated electrical and plumbing systems.

Activities performed:

- Conducted daily supervision of works to ensure all works were performed according to proper engineering practice, drawings and technical specifications.
- Certified quality and quantity of works performed for payment to the contractor.
- Placed an emphasis on safe construction practices (zero incident) and on maintaining a high quality of construction.

Expert's contact information:

Email: jcchia82@yahoo.es

Phone: +5016102302

Name of Bidder: A&N Construction		
Position: Construction Manager		
Personnel Information	Name: Norman Reimer	Date of Birth: 13 February 1972
	Professional Qualifications: Contractor	
Present Employment	Name of Employer: A&N Construction	
	Address of Employer: Route 20 East, Spanish Lookout, Cayo, Belize	
	Telephone: 610-1657	Contact (manager / personnel officer): Nettie Friesen
	Fax: 823-0016	E-mail: constructionan@yahoo.com
	Job Title: Director	Years with Present Employer: 31 years
Summarize professional experience over the last 10 years in reverse chronological order. Indicate particular technical and managerial experience relevant to the project		
From	To	Company/Project/Position/Relevant Technical and managerial Experience
Present	2015	A&N Construction / Hummingbird Highway Rehabilitation Project / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
Present	2003	A&N Construction / Various Road Projects in the Spanish Lookout Community / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2019	2018	A&N Construction / Paving Subcontractor to Belize Roadway Construction for Santa Elena Cayo Road & Roadway Marking Subcontractor to Cisco Construction for Phillip Goldson Highway / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2015	2014	A&N Construction / Joseph Andrews Boulevard in Santa Elena/San Ignacio, Cayo / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring

		of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2014	2013	A&N Construction (Subcontractor to Belize Roadway Construction) / Hopkins Stann Creek Road / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2013	2012	A&N Construction / Jane Usher Blvd & Neal Penn Road, Belize City / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2012	2012	A&N Construction / Rehabilitation of Streets in Belmopan, Cayo & Corozal Town, Corozal / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2009	2009	A&N Construction / Progresso to Copper Bank Road / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2009	2008	A&N Construction / Yo Creek to San Antonio Road Upgrading / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.

2008	2007	A&N Construction / Tower Hill to Ship Yard Road Upgrade / Construction Manager/ Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2007	1988	A&N Construction / Various Road Project / Construction Manager/ Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.



Route 20 East
Spanish Lookout, Cayo
Belize

1st June 2019

Mr. Edgar E. Puga
Project Execution Unit
Ministry of Works
Power Lane, Belmopan, Cayo
Belize, C. A.

Re: Upgrading of Caracol Road Project Lot 1 Contract 1A²⁷
Subject: Technical Staff Letter of Acceptance

Dear Sir:

I, Norman Reimer, accept to support A&N Construction in the bid for the referenced project. In case of obtaining the contract, I agree to collaborate with A&N Construction during the duration of the project.

Sincerely,

Mr. Norman Reimer,
E: constructionan@yahoo.com P: (501) 610-1657

Norman Reimer

Route 20 East, Spanish Lookout, Cayo, Belize

Cell: (501) 615-1657

E-mail: constructionan@yahoo.com

Summary

A results oriented Managing Director with a focus on cost and establishing strategic mutually beneficial partnerships and relationships with clients and material suppliers. With extensive experience with road construction I have come to know the industry in and out and at the same time implementing new technologies as these are developed. Having knowledge of all the trades, site utilities, the Belize way of doing things, the Belize infrastructure I now have a track record of developing and maintaining strong relationships with employees, clients and public officials.

Highlights

- Team management
- Hiring and recruitment
- Project coordination
- Cost control

Work Experience (2003 to date)

- Managing Director for several road projects throughout Belize such as:
 - **2015 to date:** Hummingbird Highway Rehabilitation Project work that goes from Belmopan, Cayo to Dangriga, Stann Creek for the Government of Belize through the Ministry of Works & Transport
 - **2003 to date:** In Spanish Lookout, Cayo paving and resealing 20 miles and rehabilitation of over 15 miles of streets for the local government including 5 miles leading to the George Price Highway to inclusive of ancillary items;
 - **2018 to 2019:** In Santa Elena, Cayo road paving as a sub-contractor to Belize Roadway Construction.
 - **2018 to 2019:** In Belize City, Belize road markings for Phillip Goldson Highway as subcontractor to Cisco Construction
 - **2014:** In Hopkins, Stann Creek Road paving as a sub-contractor for main contractor Belize Roadway Construction;
 - **2014:** In addition to road works in Santa Elena/San Ignacio, Cayo for Joseph Andrews Boulevard and other parts of the country for clients such as Ministry of Works & Transport, local governments and private sector
 - **2012 to 2013:** In Belize City, Jane Usher Boulevard for the Government of Belize through the Ministry of Works & Transport;
 - **2012:** In Belmopan, Cayo and Corozal Town, Corozal paving and rehabilitation work for Governmental Agencies such as Belize Social Investment Fund, City of Belmopan as well as for the Private Sector;

- **2009:** Rehabilitation of Progresso to Copper Bank & Progresso to Chunox Roads in Corozal including culverts, drains, base/sub-base work.
- **2008:** Upgrading of the Yo Creek to San Antonio Road in Orange Walk including culverts, drains, base/sub-base work.
- **2007 to 2008:** Upgrade Tower Hill to Shipyard Road, Orange Walk including culverts, drains, base/sub-base work.
- **1988 to 2007:** Various road construction projects throughout the country of Belize.
- Main duties included, but not limited to:
 - Reduce project costs by managing staging areas and reducing staff lines effectively.
 - Build productive industry relationships.
 - Manage business to eliminate cash drains and increase overall profit.
 - Manage day-to-day operations and develop long term strategy for the company's growth in Belize.
 - Manage a team of various individuals for all aspects of their duties implementing strategies in line with the company objectives and at the same time coaching, training, planning, and support the team in a collaborative manner.
- Work included, but not limited to:
 - Establishing a highly competitive road construction company in Belize.
 - Paved miles of roads in Belize for the benefit of the country.
 - Ensure quality assurance by effectively and efficiently managing personnel, materials, tools, equipment, and plant.
 - Negotiate multiple contracts for the benefit of all parties involved.
 - Communicate constantly with private as well as local and national governmental agencies.

Name of Bidder: A&N Construction		
Position: Alternate Construction Manager		
Personnel Information	Name: Franz Elias	Date of Birth: 24 April 1985
	Professional Qualifications: Contractor	
Present Employment	Name of Employer: A&N Construction	
	Address of Employer: Route 20 East, Spanish Lookout, Cayo, Belize	
	Telephone: 615-1657	Contact (manager / personnel officer): Nettie Friesen
	Fax: 823-0016	E-mail: constructionan@yahoo.com
	Job Title: Manager	Years with Present Employer: 16 years
Summarize professional experience over the last 10 years in reverse chronological order. Indicate particular technical and managerial experience relevant to the project		
From	To	Company/Project/Position/Relevant Technical and managerial Experience
Present	2015	A&N Construction / Hummingbird Highway Rehabilitation Project / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
Present	2003	A&N Construction / Various Road Projects in the Spanish Lookout Community / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2019	2018	A&N Construction / Paving Subcontractor to Belize Roadway Construction for Santa Elena Cayo Road & Roadway Marking Subcontractor to Cisco Construction for Phillip Goldson Highway / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2015	2014	A&N Construction / Joseph Andrews Boulevard in Santa Elena/San Ignacio, Cayo / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring

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		of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2014	2013	A&N Construction (Subcontractor to Belize Roadway Construction) / Hopkins Stann Creek Road / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2013	2012	A&N Construction / Jane Usher Blvd & Neal Penn Road, Belize City / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2012	2012	A&N Construction / Rehabilitation of Streets in Belmopan, Cayo & Corozal Town, Corozal / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2009	2009	A&N Construction / Progresso to Copper Bank Road / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2009	2008	A&N Construction / Yo Creek to San Antonio Road Upgrading / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.

2008	2007	A&N Construction / Tower Hill to Ship Yard Road Upgrade / Construction Manager/ Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.
2007	2003	A&N Construction / Various Road Project / Construction Manager/ Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.



Route 20 East
Spanish Lookout, Cayo
Belize

1st June 2019

Mr. Edgar E. Puga
Project Execution Unit
Ministry of Works
Power Lane, Belmopan, Cayo
Belize, C. A.

Re: Upgrading of Caracol Road Project Lot 1 Contract 1st
Subject: Technical Staff Letter of Acceptance

Dear Sir:

I, Franz Elias, accept to support A&N Construction in the bid for the referenced project. In case of obtaining the contract, I agree to collaborate with A&N Construction during the duration of the project.

Sincerely,

Mr. Franz Elias,
E: constructionfe@yahoo.com P: (501) 615-1657

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Franz Elias

Route 20 East, Spanish Lookout, Cayo, Belize

Cell: (501) 615-1657

E-mail: constructionfe@yahoo.com

Summary

I consider myself a skilled and adaptable road worker with a strong experience in chip seal road work. Being use to the strenuous and repetitive tasks and working in a variety of weather conditions for over 15 years now. I am a multitasker who is able to handle a high volume of construction and rehabilitation work with speed and accuracy.

Highlights

- Wide experience in road work from vegetation clearing to paving including associated drainage and earthwork
- Exceptional knowledge of road work equipment operations, maintenance and repair
- Familiar with road work safety procedures
- Familiar with lined and unlined drainage work, culvert and bridge construction, maintenance and repair

Work Experience (2003 to date)

- Construction Manager for several road projects throughout Belize such as:
 - **2015 to date:** Hummingbird Highway Rehabilitation Project work that goes from Belmopan, Cayo to Dangriga, Stann Creek for the Government of Belize through the Ministry of Works & Transport
 - **2003 to date:** In Spanish Lookout, Cayo paving and resealing 20 miles and rehabilitation of over 15 miles of streets for the local government including 5 miles leading to the George Price Highway to inclusive of ancillary items;
 - **2018 to 2019:** In Santa Elena, Cayo road paving as a sub-contractor to Belize Roadway Construction.
 - **2018 to 2019:** In Belize City, Belize road markings for Phillip Goldson Highway as subcontractor to Cisco Construction
 - **2014:** In Hopkins, Stann Creek Road paving as a sub-contractor for main contractor Belize Roadway Construction;
 - **2014:** In addition to road works in Santa Elena/San Ignacio, Cayo for Joseph Andrews Boulevard and other parts of the country for clients such as Ministry of Works & Transport, local governments and private sector
 - **2012 to 2013:** In Belize City, Jane Usher Boulevard for the Government of Belize through the Ministry of Works & Transport;
 - **2012:** In Belmopan, Cayo and Corozal Town, Corozal paving and rehabilitation work for Governmental Agencies such as Belize Social Investment Fund, City of Belmopan as well as for the Private Sector;

- 2009: Rehabilitation of Progreso to Copper Bank & Progreso to Chunox Roads in Corozal including culverts, drains, base/sub-base work.
- 2008: Upgrading of the Yo Creek to San Antonio Road in Orange Walk including culverts, drains, base/sub-base work.
- 2007 to 2008: Upgrade Tower Hill to Shipyard Road, Orange Walk including culverts, drains, base/sub-base work.
- Main duties included, but not limited to:
 - Providing training for new employees.
 - Coordination of work.
 - Upholding safety rules and precautions in all work performed.
 - Provide assistance to consultants and clients as required.
 - Ensure machinery is maintained and checked
- Work included, but not limited to:
 - Planting of trees and removal as necessary.
 - Installing and removing road signs and barriers as needed for maintenance of traffic.
 - Perform all tasks in bill of quantities to technical specifications for completion of high-quality projects to the satisfaction of the clients.
 - Maintain time sheets and machinery logs with completeness and accuracy.
 - Oversee road work for earthwork, paving work, signing and making work; culvert construction and a variety of other road work related tasks.

Name of Bidder: A&N Construction		
Position: Quality Control Manager		
Personnel Information	Name: Orson L. Butler	Date of Birth: 28 November 1977
	Professional Qualifications: Associated Degree in Building and Civil Engineering	
Present Employment	Name of Employer: A&N Construction	
	Address of Employer: Route 20 East, Spanish Lookout, Cayo, Belize	
	Telephone: 610-4712	Contact (manager / personnel officer): Nettie Friesen
	Fax: 823-0016	E-mail: constructionan@yahoo.com
	Job Title: QA/QC Manager	Years with Present Employer: 3+ years
Summarize professional experience over the last 10 years in reverse chronological order. Indicate particular technical and managerial experience relevant to the project		
From	To	Company/Project/Position/Relevant Technical and managerial Experience
Present	2015	A&N Construction / Hummingbird Highway Rehabilitation Project / Quality Control Manager / Technical and managerial road construction experience such as carrying out inspections and testing; ensuring all work is in compliance with contract requirements; review of shop drawings for conformance with projects specifications; maintaining tests logs; submitting, tracking, reviewing, resubmitting testing; assist team in preparing RFIs as necessary; planning and working with field team for quality hold points to ensure inspections and testing; and other duties assigned.
2015	2001	Rodla Construction Company Limited / Various Construction Projects including Roads / Construction Manager / Technical and managerial road construction experience such as managing job sites; scheduling of construction crews and ensuring all project tasks are fully staffed; hiring of project required part-and full-time laborers; managing supplies, materials, and labor; overseeing sub-contractors and vendors to ensure quantity and quality of materials required are met; ensuring environmental and safety guidelines are adhered to; and other duties assigned.

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Route 20 East
Spanish Lookout, Cayo
Belize

1st June 2019

Mr. Edgar E. Puga
Project Execution Unit
Ministry of Works
Power Lane, Belmopan, Cayo
Belize, C. A.

Re: Upgrading of Caracol Road Project Lot 1 Contract 1A^{Rev P}
Subject: Technical Staff Letter of Acceptance

Dear Sir:

I, Orson Butler, accept to support A&N Construction in the bid for the referenced project. In case of obtaining the contract., I agree to collaborate with A&N Construction during the duration of the project.

Sincerely,

Mr. Orson Butler,
E: orsrac@yahoo.com P: (501) 610-4712

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Orson L. Butler

304 Maurice Bishop Street, Belama Phase 2, Belize City, Belize, 610-4712 orsrac@yahoo.com

Personal

Nationality: Belizean

Education

Belize Technical College (1997)
Anglican Cathedral College (1995)

Qualifications

Associate Degree in Applied Science (Building and Civil Engineering)
City and Guilds of London Ordinary Technician Pass in Mathematics
And Credit in Building Construction and Drawing. (1997)

Caribbean Examination Council (1995)
Chemistry (III) General
Mathematics (II) General

Experiences

2015- Present **Construction Technician/Surveyor**, A & N Construction Ltd. Spanish Lookout.

Hummingbird Highway Rehabilitation
Client – Government of Belize
Senior Lab Technician and Surveyor

2001 - 2015 **Construction Technician/Surveyor**, Rodla Construction Co., Ltd, Belize City, Belize.

Old Northern Upgrading
Client – Government of Belize
Surveying, setting out, and paving Hotmix

Hopkins Road Upgrading
Client – Government of Belize
Surveying, setting out, topographic survey and quality control.

Apron Expansion
Client – Belize Airports Authority
Responsibilities – Surveying, setting out, topographic survey and quality control.

Albert Street
Client – Government of Belize
Responsibilities – Levels, quality control and on site supervision

Progresso Road Rehabilitation
Client – Government of Belize
Responsibilities – Surveying, Realignment and on site supervision

Eastern Runway Extension
Client – Belize Airports Authority
Responsibilities – Surveying, setting out and topographic survey.

Installation of water and waste water pipes across BAA airfield

Client – Belize Brewing Company Limited
Responsibilities – Setting out and on site supervision

Car Park B Expansion
Client- Belize Airport Concession Company Limited
Responsibilities – Surveying, setting out(kerb, lighten and etc.) and on site supervision

Buttercup Estates Residential Subdivision
Client- Buttercup Development Co., Ltd.
Responsibilities- Surveying

Boom / Mussel Creek Road Upgrading
Client- Government of Belize
Responsibilities –Surveying, quality control and on site supervision

Belmopan to Dangriga Fiber link
Client- Belize Telecommunications Limited
Responsibilities – Surveying/Setting out and supervision

Altun Ha Road Upgrade
Client- Ministry of Tourism
Responsibilities – Surveying, quality control and on site supervision

Border Management Projects – Northern & Western Borders
Client- Border Management Agency / Government of Belize
Responsibilities – Setting out and monitoring of civil works

1997 - 2001 **Senior Lab Technician/Surveyor**, Professional Engineering Services Limited, Belize City, Belize.

Western Taxiway Expansion
Client – Belize Airports Authority
Responsibilities – Assistant Field Technician responsible for material testing.

Proposed Eastern Runway Extension
Client – Belize Airports Authority
Responsibilities – Geotechnical investigations, setting out and topographic survey.

San Pedro Airstrip
Client – Belize Airports Authority
Responsibilities - Surveying

Bulk Storage Relocation – Phase One
Client – Belize Sugar Industries
Responsibilities – Monitor setting out works, soil testing

Satellite City – La Democracia
Client – Adolf Lupp Company
Responsibilities – Topographical survey and geotechnical investigations

Geotechnical Experience and Laboratory Testing

Field testing using Pennine equipment
Preparation and collection of field samples
Preparation of bore hole logs
Insitu density – sand cone method
Soil classification
Plasticity index
Dry density / moisture content (Proctor)
Sieve analysis

NR

Bulk density
Concrete sampling & testing
Certified by Humboldt Scientific Inc. to operator Nuclear Density Gauge

Computer Skill

Auto Cad, Excel Spreadsheet, Windows, Word.



Route 20 East
Spanish Lookout, Cayo
Belize

1st June 2019

Mr. Edgar E. Puga
Project Execution Unit
Ministry of Works
Power Lane, Belmopan, Cayo
Belize, C. A.

Re: Upgrading of Caracol Road Project Lot 1 Contract 1A^{sup}
Subject: Technical Staff Letter of Acceptance

Dear Sir:

I, Jose Ervin Carrillo, accept to support A&N Construction in the bid for the referenced project. In case of obtaining the contract., I agree to collaborate with A&N Construction during the duration of the project.

Sincerely,

Mr. Jose Ervin Carrillo, P. Eng.
E: ing.joeervin@gmail.com P: (501) 608-0576


RR

Other Personnel CV/Letters of Acceptance

NR

Name: Jose Ervin Carrillo
 Address: Mile 13, George Price Highway
 Tel No. 608-0576
 E-mail: ing.joervin@gmail.com
 Date of Birth: 22 October 1987
 Nationality: Belizean
 Languages: English-Written and Verbal
 Spanish-Written and Verbal

Jose Ervin Carrillo




Grade: Corporate Member
 Discipline: Civil
 Registration No.: 217-2018
 Expires: 31 Dec 2018

Jose Ervin Carrillo
 SIGNATURE

ALVARADO E. GELMUNDO
 Honorary Secretary

VICTOR MIRANDA
 President



Work Experience	<p>A&N Construction</p> <ul style="list-style-type: none"> • Period: 2016-Present • Project: Rehabilitation of the Hummingbird Highway • Project Length: 52.0 miles • Designation: Surveying Engineer/Site Engineer/Project Manager Assistant <p>Responsibilities include but not limited to:</p> <ul style="list-style-type: none"> • Coordinate with Project Manager subsequent work activities and submit its respective request for inspection and approval. • Planning and organizing different tasks and assigning the resources necessary • Elaborate summary of road work activities on a daily basis and report work progress using Microsoft Project • Ensure that the contractor is fully executing and complying with the contracted scope of work • Inspect and detail road surface condition and elaborate roughness survey. • Conduct field inspection on existing structures; collecting particular information for inventory and maintenance purpose. • Assist in topographic and construction survey. Establish benchmarks and perform Route Surveying. • Provide survey controls such as stationing/chainage along the project road to facilitate proper monitoring and control of work activities. • Supervise road work activities, inspect and conduct field measurement and quantify the works completed. • Compile and certify along with the consultants, all measurements of works executed by the contractor. This as required to meet interim payment certificates. • Categorize and file all the works executed on a monthly basis • Survey defects of works and provide recommendation of immediate action to be taken. • List out balance of works prior to the completion certificate. • Monitoring job site general safety
	<p>Gutierrez and Associates</p> <ul style="list-style-type: none"> • Period: 5/14-10/15 • Project: Quality assurance/Quality Control <p>Responsibilities include but not limited to:</p> <ul style="list-style-type: none"> • Prepare work methodology and follow up with the procedures • Supervise the quality of the works executed and allow for the compliance of the technical specification • Labour management and safe working environment • Storing and updating work site diary

Academic Formation	<p>Universidad de San Carlos de Guatemala. 2006-2013</p> <ul style="list-style-type: none"> • Completed Curriculum of studies in 2012 • Civil Engineering board examination approved in 2012 • Defence of Thesis Statement approved in 2013 • Bachelor's degree in Civil Engineering obtained in 2013. • Registered by Central American Accreditation Agency for Architecture and Engineering Programs <p>Sacred Heart High School. 2001-2005</p> <ul style="list-style-type: none"> • High School Diploma/ Three Science Major <p>St. Andrew Anglican Primary School. 1993-2001</p> <ul style="list-style-type: none"> • Primary School Diploma
Computer Knowledge	<ul style="list-style-type: none"> • Microsoft Office • Microsoft Project • AutoCAD • Computer and Structures Integrated • Civil 3D • Microsoft Access
References	<p>Stepan Varjabedian</p> <ul style="list-style-type: none"> • NARCO Consultants • Resident Engineer/Team Leader • Rehabilitation of the Hummingbird Highway • Email: stepanverjabedian@gmail.com <p>Francisco Gonzalez</p> <ul style="list-style-type: none"> • A&N Construction • Project Manager • Phone No.+501 6369544

MR

Bidders Qualification following Prequalification

The Bidder shall update the information given during the corresponding prequalification exercise to demonstrate that he continues to meet the criteria at the time of prequalification regarding:

- Eligibility
- Pending Litigation
- Financial Situation

For the purpose, the Bidder shall use the forms included in this Section.

Form ELI – 1: Bidder Information Form

Bidder's name: <u><i>A&N Constructions</i></u>
In case of Joint Venture (JV), name of each member: <u><i>None</i></u>
Bidder's Actual or intended country of registration: <u><i>Belize</i></u>
Bidder's actual year of incorporation: <u><i>2003</i></u>
Bidder's legal address [in country of registration]: <u><i>Route 20 East, Spanish Lookout, Cayo, Belize</i></u>
Bidder's authorized representative information Name: <u><i>Norman Reimer</i></u> Address: <u><i>Route 20 East, Spanish Lookout, Cayo, Belize</i></u> Telephone/Fax numbers: <u><i>(501) 610-1657</i></u> E-mail address: <u><i>constructionan@yahoo.com</i></u>
1. Attached are copies of original documents of <input checked="" type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.3. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of Government-owned enterprise or institution, in accordance with ITA 4.5 documents establishing: <ul style="list-style-type: none"> • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not dependent agency of the Employer
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

CONDITIONS OF CONTRACT

General Conditions (GC)

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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 Replacement 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.

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:

$$P_n = a + b L_n / L_o + c E_n / E_o + d M_n / M_o + \dots \text{ where:}$$

"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"¹ 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"² 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"³ 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"⁴ 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

¹ "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.

² 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.

³ "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

⁴ 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 Belmopan
Engineer's name and address	1.1.2.4 & 1.3	Errol Gentle, Chief Executive Officer, Ministry of Works
Fund's name	1.1.2.11	OFID (OPEC Fund for International Development)
Name of the Recipient of OFID Financing	1.1.2.12	The Government of Belize
Time for Completion	1.1.3.3	18 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 into a Contract Agreement	1.6	28 Days
Time for access to the Site	2.1	Seven (7) days after the Commencement Date
Engineer's Duties and Authority	3.1(b)(ii)	Variations resulting in an increase of the Accepted Contract Amount in excess of <u>1</u> % shall require approval of the Employer.

Conditions	Sub-Clause	Data
Performance Security	4.2	The performance security will be in the form of a Demand Guarantee in the amount of Ten Percent (10%) of the Accepted Contract Amount and in the same currency of the Accepted Contract Amount.
Normal working hours	6.5	7:00 - 12:00pm & 1:00 - 5:00pm week days
Delay damages for the Works	8.7 & 14.15(b)	<u>0.0001</u> % of the Contract Price per day.
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.

Conditions	Sub-Clause	Data
Minimum Amount of Interim Payment Certificates	14.6	2% 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: a. evidence of insurance. b. relevant policies Maximum amount of deductibles for insurance of the Employer's risks	18.1 18.2(d)	 28 days 49 days 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 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],¹ 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...², and any demand for payment under it must be received by us at this office on or before that date.

¹ 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.

² 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.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

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]¹ 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 _____,

¹ 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 __, ² 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.

[signature(s)]

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

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]¹ 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

¹ 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: 22ND OCTOBER, 2019

Subject: UPGRADING OF CARACOL ROAD PROJECT- CONTRACT 1A AND
CONTRACT 1B PROCUREMENT OF CONTRACTORS- POST
QUALIFICATION

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