

Date: 06 September 2019

**CONTRACT WW 351W – Rehabilitation / Provision of Sewerage Infrastructure at  
Residence Atlee – CHA Phase IV**

**Procurement Reference No: CPB/47/2019**

**Subject: Addendum No.1**

Following queries from prospective bidders regarding the bidding document, we hereby issue Addendum No.1 to the Contract which is enclosed herewith.

Yours faithfully,



**N.Jowaheer  
Officer in Charge**

Enclosure: Addendum No.1

**CONTRACT WW351W – Rehabilitation/Provision of Sewerage Infrastructure  
at Residence Atlee, Curepipe- CHA Phase IV**

**Procurement Reference: CPB / 47/2019**

**ADDENDUM NO. 1**

**Part 1: Extension of Bid Submission Date**

The attention of prospective bidders is drawn to the fact that Pursuant to clause ITB 23.1 of the Bidding, the deadline for submission of bids is postponed to Friday **27 September 2019, up to 13:30 hours (local time) at latest.**

From the foregoing, kindly note the following:

1. Pursuant to clause ITB 19.1 of the Bidding Data Sheet, the bids shall be valid for 120 days as from the revised closing date for submissions of bids, **or up to 24 January 2020**, whichever is later.
2. Pursuant to clause ITB 8.1 of the Bidding Data Sheet, kindly note that request for clarification should be received by the Employer not later than **14 days** prior to the revised deadline date for submissions of bids.
3. Bidders shall fill in the Bid Submission Form duly signed by an Authorised person. Bid Securing Declaration shall be valid up to 120 days from the date fixed for the bid submission deadline in accordance with the Bidding Document or up to 24 January 2020 whichever is later. The revised Bid Submission Form is enclosed herewith at **Annex 1** of this Addendum.
4. Pursuant to clause ITB 26.1 of the Bidding Data Sheet, the bid opening shall take place at:

The Central Procurement Board  
Conference Room, 1<sup>st</sup> Floor,  
Social Security House,  
Julius Nyerere Avenue,  
Rose-Hill,  
MAURITIUS.

**Date: 27 September 2019**

**Time: As from 14: 00 hours (local time)**



**CONTRACT WW351W – Rehabilitation/Provision of Sewerage Infrastructure  
at Residence Atlee, Curepipe- CHA Phase IV**

**Procurement Reference: CPB / 47/2019**

**ADDENDUM NO. 1 (continued)**

**Part 2: Amendment of Bill item No.1.23 of Bill No. 1 (Preliminaries & General Items)**

Bill item	Description	Amendment
1.23	Allow for any Contingent Works to be undertaken as directed by the Employer. Payment for resources deployed to be made as per rates priced under Bill No. 5: Schedule of Rates	Allow for any Contingent Works to be undertaken as directed by the Employer. Payment for resources deployed to be made as per rates priced under Bill No. 4: Schedule of Rates

The whole of amended Bill No.1: Preliminaries and Generals is herewith enclosed at **Annex 2** of this Addendum. Bill item 1.23 is hereby amended accordingly by Bill item 1.23R.

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**Part 3: Queries from Bidders**

**Query No.1:**

P&G items have been limited to 16% of the Bid Amount, excluding Provisional Sum. Due to the complexity of the works and extent of the site, our P&G costs will be higher than that of usual Tenders. Therefore, we request that the limit for the P&G items be raised to reflect the complexity of the Works

**Reply No.1:**

Bidders are advised to limit the amount of P&G items (excluding Provisional Sum in this bill) to 20 % of the Bid Amount excluding all Provisional Sums and Contingencies.

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**Query No.2:**

Referring to bill items D.2.16, D.2.16.1, D.2.16.2 and D.2.16.3, grateful if different bill items could be provided for internal and external backdrop.

**Reply No.2:**

Bill Items for internal and external backdrop have been split. Refer to relevant amended *Bill Items D.2 of Bill No.2: Street Sewer*. The whole of amended Bill No.2: Street Sewer is herewith enclosed at **Annex 3** of this Addendum.





**CONTRACT WW351W – Rehabilitation/Provision of Sewerage Infrastructure**  
**at Residence Atlee, Curepipe- CHA Phase IV**

**Procurement Reference: CPB /47/2019**

**ADDENDUM NO. 1 (continued)**

**Query No.3:**

We would be grateful if the following discrepancies, concerning the typical trench details for both main sewer on public roads and for the typical 110mm diameter pipe, could be clarified:

- a. Drawing no. 11 and Sub-Clause C8 of the preambles to BoQ mention:
  - i. Bedding of Class B
  - ii. 300mm thick selected backfill above crown of pipe
- b. The Bill descriptions, however, mention Class S Bedding.
- c. Specifications state that backfilling above selected fill shall be done using crusher run.
- d. The Wayleave for Municipal Council mentions the use of Crusher Run for the last top layer of 400mm only.
- e. The RDA Wayleave mentions Full Depth Crusher Run.

**Reply No.3:**

We wish to provide the following clarifications regarding discrepancies, concerning the typical trench details for both main sewer on public roads and for house connection sewers:

- Bedding shall be of Class S for both main sewer and house connection sewers. Drawing No.11 is superseded and replaced by Drawings No.11R which is enclosed at **Annex 4** of this Addendum.
- Trenches along both RDA Classified Road and Municipal Roads shall be backfilled to full depth with crusher-run. Refer to amended drawing No.11R.

Trenches for Internal Sewers (house connection) shall be backfilled to full depth with crusher-run. Refer to amended drawing No.11R.

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**Query No.4:** Please confirm the asphalt thickness for bill item C.2.13.

**Reply No. 4:** The thickness of the asphaltic wearing course shall be 50 mm as per the wayleave requirements of the Municipal Council. Bill item C2.13 is hereby amended accordingly by Bill item C2.13R as indicated in the amended Bill No.2 enclosed at **Annex 3**.



# Annex 1

## Bid Submission Form

*Note: All italicized text is for use in preparing these form and shall be deleted from the final products.*

Date: \_\_\_\_\_

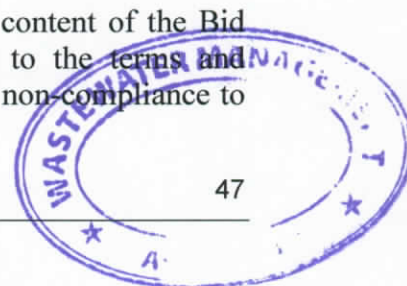
Bidder's Reference No.: \_\_\_\_\_

Procurement Reference No: **CPB /47/2019**

To: **The Officer in Charge**  
**Wastewater Management Authority**  
**The Celicourt**  
**Sir Celicourt Antelme Street**  
**Port-Louis**  
**Mauritius**

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) Clause 9;
- (b) We offer to execute in conformity with the Bidding Documents the following Works: **Rehabilitation/Provision of Sewerage Infrastructure at Residence Atlee, Curepipe, Contract WW 351W.**
- (c) The total price of our Bid, after any discounts offered in item (d) below and excluding VAT is:  
\_\_\_\_\_  
\_\_\_\_\_;
- (d) The discounts offered and the methodology for their application are:  
\_\_\_\_\_  
\_\_\_\_\_;
- (e) Our bid shall be valid for a period of **120 days** from the date fixed for the bid submission deadline in accordance with the Bidding Document or up to 24 January 2020 whichever is later, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) I/We hereby confirm that I/we have read and understood the content of the Bid Securing Declaration attached herewith and subscribe fully to the terms and conditions contained therein, if required. I/We understand that non-compliance to



the conditions mentioned may lead to disqualification.

- (g) If price adjustment provisions apply, the Table(s) of Adjustment Data shall be considered part of this Bid;<sup>7</sup>
- (h) If our bid is accepted, we commit to obtain a performance security and a preference security (if applicable) in accordance with the Bidding Document;
- (i) Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries;
- (j) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 5.4;
- (k) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 5.4, other than alternative offers submitted in accordance with ITB 14;
- (l) Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible under the laws of Mauritius or official regulations or by an act of compliance with a decision of the United Nations Security Council;
- (m) We are not a government owned entity / We are a government owned entity but meet the requirements of ITB 5.6;<sup>8</sup>
- (n) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: <sup>9</sup>

Name of Recipient	Address	Reason	Amount
_____	_____	_____	_____
_____	_____	_____	_____

<sup>7</sup> Include if price adjustment provisions apply in the Contract in accordance with PCC Sub-Clause 14.8  
*Adjustments for Changes in Cost.*

<sup>8</sup> Use one of the two options as appropriate.

<sup>9</sup> If none has been paid or is to be paid, indicate "none".





(o) We have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption as per the principles described hereunder, during the bidding process and contract execution:

- i. We shall not, directly or through any other person or firm, offer, promise or give to any of the Public Body's employees involved in the bidding process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- ii. We shall not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
- iii. We shall not use falsified documents, erroneous data or deliberately not disclose requested facts to obtain a benefit in a procurement proceeding.

We understand that transgression of the above is a serious offence and appropriate actions will be taken against such bidders.

(p) We understand that this bid, together with your written acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;

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

(r) If awarded the contract, the person named below shall act as Contractor's Representative:

Name: \_\_\_\_\_

In the capacity of: \_\_\_\_\_

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

Duly authorized to  
sign the Bid for and  
on behalf of: \_\_\_\_\_

Date: \_\_\_\_\_

Seal of Company \_\_\_\_\_





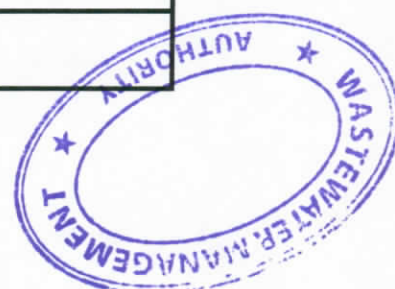
## Annex 2

**Contract WW 351W: Rehabilitation and Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe**

**Amended Bill No.1R: Preliminaries and General**

Note: Bidders are advised to limit the amount of P&G items (excluding Provisional Sum in this bill) to 20 % of the Bid Amount excluding all Provisional Sums and Contingencies.

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.1	Allow for the provision of Performance Security / Performance Guarantee	Sum	1		
1.2	Allow for the cost of providing Insurance of the Works	Sum	1		
1.3	Allow for the cost of providing Insurance of all Construction Plant and Equipment	Sum	1		
1.4	Allow for the cost of providing Third Party Insurance against damage to property and persons including officers of the Employer	Sum	1		
1.5	Allow for the cost for Mobilisation (in terms of labour, plant & equipment, tools & materials, necessary for the works)	Sum	1		
1.6	Allow for the cost of Management and Supervision for the duration of Construction	Sum	1		
1.7	Allow for the cost of establishing and maintenance of the Contractor's Site Office and its Worker's Welfare for the duration of the Contract	Sum	1		
1.8	Allow for the cost of establishing and maintenance of the Employer's Site Office and its staff Welfare for the duration of the Contract, excluding DLP	Sum	1		
1.9	Allow for the provision of facilities to the Employer for checking, and setting out of the works, examination, testing and measuring the works including the provision of a chainman, all as specified.	Sum	1		
1.10	Allow for site investigation, surveys, design and preparation and submission of survey and Design Report	Sum	1	400,000.00	
1.11	Allow for the compilation and submission of site records, progress photographs and site progress; submission to be on a monthly report basis	Sum	1		
1.12	Provide for protecting existing services, road furniture and for making good any damage caused thereof during excavation works	Sum	1		
1.13	Provide for setting up level datum pegs and for setting out and site surveys in accordance with the Specifications and as directed by the Employer	Sum	1		
1.14	Provide for watching, security, lighting, flagging and site safety over the duration of the Contract	Sum	1		
<b>CARRIED TO COLLECTION</b>					



**Contract WW 351W: Rehabilitation and Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe**

**Amended Bill No.1R: Preliminaries and General**

**Note: Bidders are advised to limit the amount of P&G items (excluding Provisional Sum in this bill) to 20 % of the Bid Amount excluding all Provisional Sums and Contingencies.**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.15	Allow for traffic diversion requirements to execute the works in accordance with the conditions of relevant authorities/bodies including reinstatement of existing traffic signs to original conditions after traffic diversion (Excluding sum for erection of all new traffic signs and Police Assistance)	Sum	1		
1.16	Provide and maintain for temporary traffic signs, markings and barricades at every location as required by relevant Authorities including support and lighting (All traffic signs should be maintained in good condition at all times)	Sum	1		
1.17	Allow for the provision of police assistance as and when required by the relevant Authorities for traffic diversion	Prov. Sum	1	450,000.00	
1.17.1	Allow for Contractor's mark up on item 1.17		%		
1.18	Allow for the supply, erection, maintenance and removal of waterproof signboards at the site and their disposal upon the instruction from the Employer as per the specifications (85% upon supply/erection and remaining 15% upon removal and disposal)	No.	2		
1.19	Allow for the Preparation of Consent / Resident's Undertaking Form, organise the filling and signature of same by all owners/occupiers of individual households	Sum	1		
	Note: Consent forms to include for CWA Account No., meter number, National ID card and Title Deed. Payment to be effected upon submission of all forms.				
1.20	Allow for conducting structural surveys of existing buildings prior to the start of the construction works and proposals for improving structural stability of same during the execution of works. Payment to be effected upon submission of Design Engineer's report on all structural problems identified, including for Health and Safety aspects.	Sum	1		
1.21	Allow for publishing of all communiques and production and distribution of pamphlets during traffic diversion schemes as well as other specific Public Relation Activity as may be directed. Rate include for a dedicated PR Officer for the duration of the Contract	Sum	1		
<b>CARRIED TO COLLECTION</b>					





**Contract WW 351W: Rehabilitation and Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe**

**Amended Bill No.1R: Preliminaries and General**

**Note:** Bidders are advised to limit the amount of P&G items (excluding Provisional Sum in this bill) to 20 % of the Bid Amount excluding all Provisional Sums and Contingencies.

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.22	Provide for additional pipes and fittings as directed by the Employer	Prov. Sum	1	700,000.00	
1.22.1	Allow for Contractor's markup for item 1.22	%			
1.23R	Allow for any Contingent Works to be undertaken as directed by the Employer. Payment for resources deployed to be made as per rates priced under Bill No. 4: Schedule of Rates	Prov. Sum		1,000,000.00	
1.24	Allow for the cost of demobilisation, including for final cleaning	Sum	1		
1.25	The Contractor shall describe hereunder (inserting any relevant Clause No.) and price any other works, obligations or things which he may consider have been omitted from the Bill of Quantities and for which he desires to enter a separate charge (The charge to be carried directly to the Amount's column). If no separate charge is made hereunder, then the rates in the Bill of Quantities shall be held as covering expenses for such works, obligations or things				
Clause No.	Description				
<b>CARRIED TO COLLECTION</b>					
Note:	1. The following items to be on a pro-rata basis over the duration of the Contract : 1.6, 1.7, 1.8, 1.11, 1.12, 1.13, 1.14,1.15				
	2. The following item to be paid according to actual progress : 1.16, 1.17, 1.18,1.19,1.20				



**Contract WW 351W: Rehabilitation and Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe**

**Amended Bill No.1R: Preliminaries and General**

Note: Bidders are advised to limit the amount of P&G items (excluding Provisional Sum in this bill) to 20 % of the Bid Amount excluding all Provisional Sums and Contingencies.

	AMOUNT (Rs)
Page 1	
Page 2	
Page 3	
Sub Total (Carried to Main Summary)	



## Annex 3



**Contract WW 351W: Rehabilitation / Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe - CHA Phase IV**

**Amended Bill No.2R: Street Sewer**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	AMOUNT (Rs)
Sec A	WORKS ALONG GUSTAVE COLLIN STREET				
A.2	Laying of Street Sewers of 300mm GRP				
A.2.1	Supply, lay, joint and test in trenches 300mm diameter GRP non pressure pipes for depth to invert less or equal to 1.5m, inclusive of all fittings required all as specified and as per drawings. Rate to include site clearance, excavation in any material including hard rock, replacement/deconstruction of existing street sewer pipe, carting away and disposal if any, working with live sewers, backfilling, trench shoring, dewatering of trenches, bedding up to 150mm above crown of pipe (Class S), selected fill up to the required level for reinstatement works, compliance with the requirements of the RDA, Municipal Council and the TMRSU.	m	15		
A2.1.1	Ditto but for depth above 1.5 m but n.e 2.0 m	m	15		
A2.1.2	Ditto but for depth above 2.0 m but n.e 2.5 m	m	125		
A2.1.3	Ditto but for depth above 2.5 m but n.e 3.0 m	m	245		
A2.1.4	Ditto but for depth above 3.0 m but n.e 3.5 m	m	140		
A2.1.5	Ditto but for depth above 3.5 m but n.e 4.0 m	m	60		
A2.1.6	Ditto but for depth above 4.0 m but n.e 4.5 m	m	50		
A2.1.7	Ditto but for depth above 4.5 m but n.e 5.0 m	m	90		
A2.1.8	Ditto but for depth exceeding 5.0 m	m	15		
CARRIED TO COLLECTION					



**Contract WW 351W: Rehabilitation / Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe - CHA Phase IV**

**Amended Bill No.2R: Street Sewer**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	AMOUNT (Rs)
	<b>Manholes Type C</b>				
A.2.2	Construct complete reinforced concrete street sewer <b>Type C</b> manholes, depth to invert not exceeding <b>1.5m</b> , with internal diameter <b>1200mm</b> (for circular type) or <b>900mm x 1200 mm</b> (for rectangular type) ; rate to include excavation, blinding, formwork, benching, slab, reinforcement, rubber ring, water proof joint, building in of pipes and concrete surround to pipe inlet and outlet and also fixing of step irons, frames, rocker pipes and heavy duty covers as specified, and removal of existing manholes, carting away and disposal if any as specified.	No	2		
A.2.2.1	Ditto but for depth above 1.5 m but n.e 2.0 m	No	4		
A.2.2.2	Ditto but for depth above 2.0 m but n.e 2.5 m	No	6		
	<b>Manholes Type D</b>				
A.2.3	Construct complete reinforced concrete street sewer <b>Type D</b> manholes, with internal diameter <b>1200mm</b> (for circular type) or <b>1000mm x 1500 mm</b> (for rectangular type) ; rate to include excavation, blinding, formwork, benching, slab, reinforcement, rubber ring, water proof joint, building in of pipes and concrete surround to pipe inlet and outlet and also fixing of step irons, frames, rocker pipes and heavy duty covers as specified for depth above <b>2.5m but n.e 3.0m</b> , and removal of existing manholes, carting away and disposal if any as specified.	No	12		
A.2.3.1	Ditto but for depth above 3.0 m but n.e 3.5 m	No	7		
A.2.3.2	Ditto but for depth above 3.5 m but n.e 4.0 m	No	4		
A.2.3.3	Ditto but for depth above 4.0 m but n.e 4.5 m	No	4		
A.2.3.4	Ditto but for depth above 4.5 m but n.e 5.0 m	No	6		
A.2.3.5	Ditto but for depth above 5.0 m .	No	3		
<b>CARRIED TO COLLECTION</b>					



**Contract WW 351W: Rehabilitation / Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe - CHA Phase IV**

**Amended Bill No.2R: Street Sewer**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	AMOUNT (Rs)
A2.4	Allow for house connections through 160mm diameter pipe from existing ICA to newly laid 300 mm dia. GRP pipes through saddles, that is shifting of house connections from old trunk sewer into new trunk sewer. Rate to include for surface clearance, excavation in any material including hard rock,exposing old connection, cutting into new pipe ,removal of existing pipes, carting away and disposal if any,supply and fix easy clip swivel type saddles suitable for 300mm dia GRP pipes,supply, laying and connection of the 160mm uPVC pipe including all fittings required to make the connection complete, bedding and backfilling. Rate to also include all labours, plant and equipment.	No.	60		
CARRIED TO COLLECTION					





**Contract WW 351W: Rehabilitation / Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe - CHA Phase IV**

**Amended Bill No.2R: Street Sewer**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	AMOUNT (Rs)
Sec B	WORKS INSIDE RESIDENCE ATLEE AND DERBY STREET				
B.2	Connection of Service Corridors Sewers/Individual Houses from ICA to Street Sewer				
B.2.5	Supply, lay, joint and test in trenches 160mm diameter uPVC pipe from ICA of Service Corridors Sewers/ Individual Houses to respective street manholes or Y-branch of Street Sewer 200mm uPVC for depth to invert less or equal to 1.5 m including compacted class S bedding, backfilling with crusher run over full depth, etc.all as specified. Rate to include for excavation in any material including bed rock, and all fittings required for any connections (such as bends, T-junction, Y-junction etc.) and removal of existing pipes, carting away and disposal if any, as specified.	m	725		
B.2.5.1	Ditto but for depth above 1.5 m but n.e 2.0 m	m	300		
B.2.5.2	Ditto but for depth exceeding 2.0 m	m	225		
B.2.6	Supply, lay, joint and test in trenches 200mm diameter uPVC pipe from ICA of Service Corridors Sewers/ Individual Houses to respective street manholes or Y-branch of Street Sewer 200mm uPVC for depth to invert less or equal to 1.5 m including compacted class S bedding, backfilling with crusher run over full depth, etc.all as specified and warning tape. Rate to include for excavation in any material including hard rock, and all fittings required for any connections (such as bends, T-junction, Y-junction etc.) and removal of existing pipes, carting away and disposal if any, as specified.	m	20		
B.2.6.1	Ditto but for depth above 1.5 m but n.e 2.0 m	m	15		
B.2.6.2	Ditto but for depth exceeding 2.0 m	m	15		
CARRIED TO COLLECTION					



**Contract WW 351W: Rehabilitation / Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe - CHA Phase IV**

**Amended Bill No.2R: Street Sewer**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	AMOUNT (Rs)
	Excavation and Pipe Laying 200mm dia				
B.2.7	Supply, lay, joint and test in trenches 200mm diameter uPVC pipe for depth to invert less or equal to 1.5 m including compacted class S bedding, backfilling etc, all as specified . Rate to include for excavation in any material including hard rock, and all fittings required for any connections (such as bends, T-junction, Y-junction as provision for each house connection etc.) and removal of existing pipes, carting away and disposal if any.	m	375		
B.2.7.1	Ditto but for depth above 1.5 m but n.e 2.0 m	m	630		
B.2.7.2	Ditto but for depth above 2.0 m but n.e 2.5 m	m	430		
B.2.7.3	Ditto but for depth above 2.5 m but n.e 3.0 m	m	300		
B.2.7.4	Ditto but for depth above 3.0 m but n.e 3.5 m	m	240		
B.2.7.5	Ditto but for depth above 3.5 m but n.e 4.0 m	m	135		
B.2.7.6	Ditto but for depth above 4.0 m but n.e 4.5 m	m	75		
B.2.7.7	Ditto but for depth above 4.5 m but n.e 5.0 m	m	50		
B.2.7.8	Ditto but for depth exceeding 5.0 m	m	135		
CARRIED TO COLLECTION					



**Contract WW 351W: Rehabilitation / Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe - CHA Phase IV**

**Amended Bill No.2R: Street Sewer**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	AMOUNT (Rs)
	<b>Manholes Type C</b>				
B.2.8	Construct complete reinforced concrete street sewer <b>Type C</b> manholes, depth to invert not exceeding <b>1.5m</b> , with internal diameter <b>1200mm</b> (for circular type) or <b>900mm x 1200 mm</b> (for rectangular type) ; rate to include excavation, blinding, formwork, benching, slab, reinforcement, rubber ring, water proof joint, building in of pipes and concrete surround to pipe inlet and outlet and also fixing of step irons, frames, rocker pipes and heavy duty covers as specified, and removal of existing manholes, carting away and disposal if any as specified. Rate to also include raising of covers and frame. The rate is applicable to both in-situ reinforced concrete manhole and precast concrete manhole.	No.	27		
B.2.8.1	Ditto but for depth above 1.5 m but n.e 2.0 m	No.	19		
B.2.8.2	Ditto but for depth above 2.0 m but n.e 2.5 m	No.	15		
	<b>Manholes Type D</b>				
B.2.9	Construct complete reinforced concrete street sewer <b>Type D</b> manholes, with internal diameter <b>1200mm</b> (for circular type) or <b>1000mm x 1500 mm</b> (for rectangular type) ; rate to include excavation, blinding, formwork, benching, slab, reinforcement, rubber ring, water proof joint, building in of pipes and concrete surround to pipe inlet and outlet and also fixing of step irons, frames, rocker pipes and heavy duty covers as specified for depth above <b>2.5m but n.e 3.0m</b> , and removal of existing manholes, carting away and disposal if any as specified.	No.	11		
B.2.9.1	Ditto but for depth above 3.0 m but n.e 3.5 m	No.	10		
B.2.9.2	Ditto but for depth above 3.5 m but n.e 4.0 m	No.	9		
B.2.9.3	Ditto but for depth above 4.0 m but n.e 4.5 m	No.	3		
B.2.9.4	Ditto but for depth above 4.5 m but n.e 5.0 m	No.	2		
B.2.9.5	Ditto but for depth above 5.0 m .	No.	5		
<b>CARRIED TO COLLECTION</b>					





**Contract WW 351W: Rehabilitation / Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe - CHA Phase IV**

**Amended Bill No.2R: Street Sewer**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	AMOUNT (Rs)
Sec C	Reinstatement				
C.2	Classified (RDA) Roads - Gustave Collin Street				
C.2.10	Temporary reinstatement of RDA roads to trench width with asphaltic concrete of thickness 50mm as wearing course. Rate to include reinstatement of sub-base & base as per the requirements of the RDA including pedestrian crossing, road marking and speedbreakers as well as its maintenance until permanent reinstatement is carried out.	m <sup>2</sup>	900		
C.2.11	Permanent reinstatement of RDA roads to whole width with asphaltic concrete of thickness 50mm as wearing course by grade A road contractor. Rate to include, milling reinstatement of sub-base & base as per the requirements of the RDA including pedestrian crossing, road marking and speedbreakers	m <sup>2</sup>	4500		
	Municipal Roads - Residence Atlee and Derby Street				
C.2.12	Temporary reinstatement of roads to trench width with asphaltic concrete of thickness 30mm wearing course, rate to include reinstatement of sub-base & base as per the requirements of the local Authorities including pedestrian crossing, road marking and speedbreakers.	m <sup>2</sup>	1520		
C.2.13R	Permanent reinstatement of Municipal Roads to whole width reinstatement with asphaltic concrete of thickness 50mm as wearing course, rate to include reinstatement of sub-base & base and reshaping works, if any, as per the requirements of the local Authorities, including pedestrian crossing, road marking and speedbreakers.	m <sup>2</sup>	11,575		
C.2.14	Milling of existing asphaltic wearing course, as directed by the Employer. The depth of surface milling shall be decided by the Employer and would depend on the extent of damage of the existing road surface.	m <sup>2</sup>	11,575		
C.2.15	Allow for reshaping works with asphaltic concrete material.	t	25		
CARRIED TO COLLECTION					



**Contract WW 351W: Rehabilitation / Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe - CHA Phase IV**

**Amended Bill No.2R: Street Sewer**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	AMOUNT (Rs)
D.2	Other Costs for Street Sewer				
D.2.16R	Extra over for Internal Manhole Backdrop for any pipe diameter and material as shown on drawing,height not exceeding 1.5m including any other excavation, breaking into manhole, pipework, support brackets,installation, connection, sealing of all fittings and pipe as specified, concrete surround, cap and holding chain etc..	No.	4		
D.2.16.1R	Internal backdrop up to 2.0 m	No.	4		
D.2.16.2R	Internal backdrop up to 2.5 m	No.	3		
D.2.16.3R	Internal backdrop above 2.5 m	No.	2		
D.2.16.4	Extra over for External Manhole Backdrop for any pipe diameter and material as shown on drawing,height not exceeding 1.5m including any other excavation, breaking into manhole, pipework, support brackets,installation, connection, sealing of all fittings and pipe as specified, concrete surround, cap and holding chain etc..		4		
D.2.16.5	External backdrop up to 2.0 m		3		
D.2.16.6	External backdrop up to 2.5 m		2		
D.2.16.7	External backdrop above 2.5 m		3		
D.2.17	Excavate exploration pits or trenches as directed, backfill, compact and reinstate to original state	No.	35		
D.2.18	Allow for refurbishment of existing manholes of any Type and dimension, Rate to include for making good of benching, walls,removal and carting away of existing slab; casting of new slab and supply and fixing of step irons, frames and manhole covers, as appropriate.	No.	10		
D.2.19	Allow for crossing of drains of any dimension, rivers, streams and culverts using D.I pipe, couplings & bends including concrete supports, fixing on structure and making good any defects to Employer's satisfaction and temporary river/stream diversion.	Prov Sum	1	500,000.00	
D.2.20	Allow for protection of sewer pipe with concrete Grade 20, as instructed by Employer including welded mesh cage type (Y08 @ 150mm c/c) , formworks and ancillary works.	m	150		
D.2.21	Connection of new sewer to existing sewer pipes/manholes of any size, including for modification/ making good of benching. Rate to include for all pipeworks and dealing with flow in existing manhole	No.	12		
D.2.22	Allow for laying of additional street sewer complete with manholes and house connections I.C's, (service manholes etc for the rehabilitation of the existing sewerage network and associated works) in the vicinity of the project area. As directed by the Employer	Prov Sum	1	500,000.00	
CARRIED TO COLLECTION					



**Contract WW 351W: Rehabilitation / Provision of Sewerage  
Infrastructure at Residence Atlee, Curepipe - CHA Phase IV**

**Amended Bill No.2R: Street Sewer**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	AMOUNT (Rs)
E.2	Diversion, relocation and replacement of utility services and drains for Gustave Collin & Residence Atlee				
E.2.23	Allow for the diversion (temporary & permanent) of existing water pipe and associated house connection as directed by the Employer including by-pass pipe / side lay	Prov Sum	1	1,000,000.00	
E.2.24	Allow for the diversion, relocation and replacement of other existing underground services, including chamber, poles, cable duct, optical cable, etc	Prov Sum	1	500,000.00	
E.2.25	Provide for crossing of 160/200 mm diameter sewer pipe under drains, culverts, boundary blockwall and stone wall. Rate to include for any repair, making good and restoration.	No.	85		
E.2.26	Provide for crossing of 160/200 mm diameter sewer pipe under fence and natural hedges. Rate to include for any repair, making good and restoration.	No.	35		
E.2.27	Allow for the replacement of existing kerbs/ Drains, services and other road furnitures and diversion & relocation of chambers, etc.	Prov Sum	1	500,000.00	
E.2.28	Allow for the raising of existing manholes and chambers, as per the requirements of the relevant Authorities	Prov Sum	1	250,000.00	
CARRIED TO COLLECTION					
Note: The following bill items are provisional and will be paid as per Bill No. 4 rates: 2.19, 2.22, 2.23, 2.24, 2.27, 2.28					



**Amended Bill No.2R: Street Sewer**

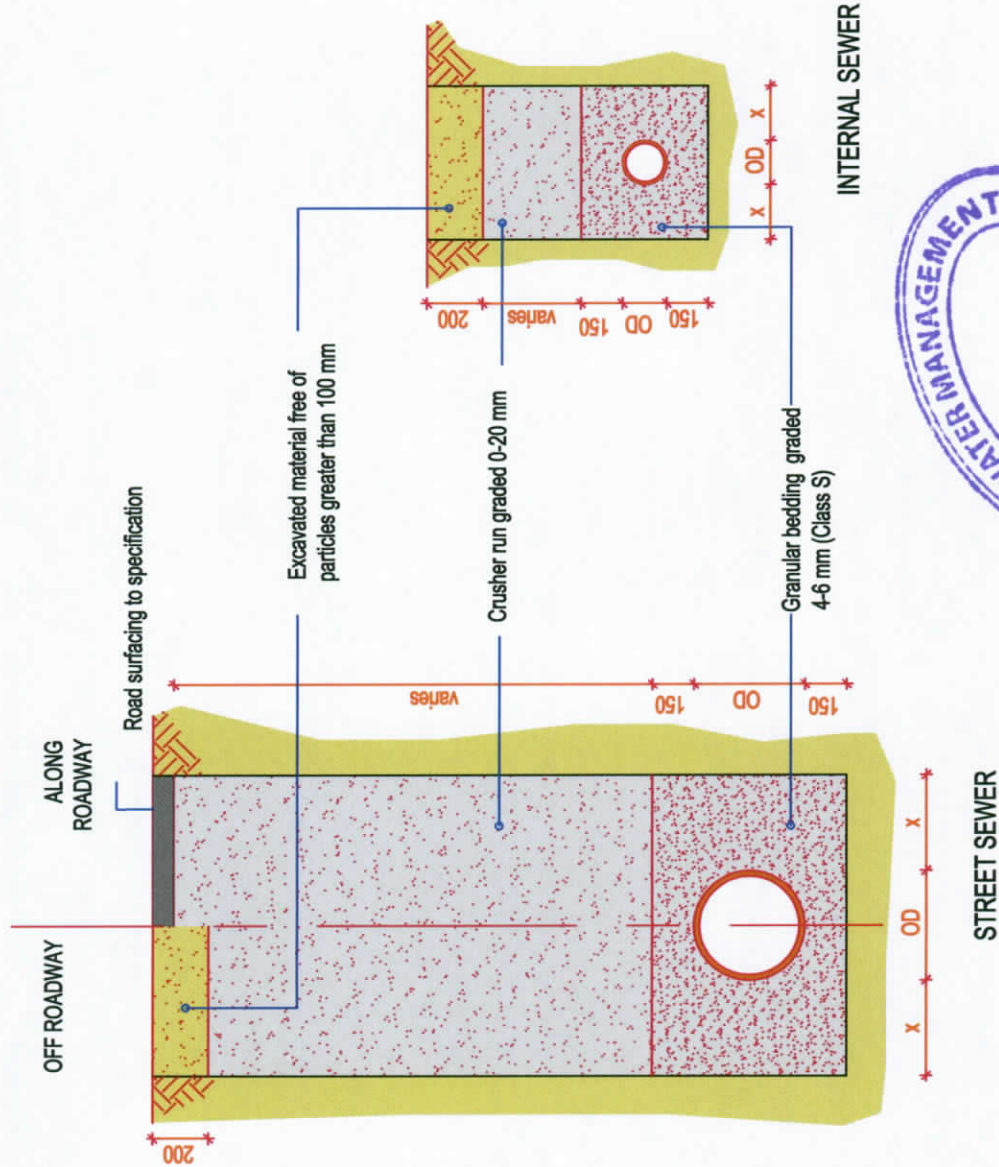
	AMOUNT (Rs)
Page 1	
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Page 9	
Sub Total (Carried to Main Summary)	





## Annex 4

# TYPICAL TRENCH DETAILS



**Trench stability**  
The trench stability shall be ensured either by means of a trench support system, by battering the trench sides or by other suitable means.

**Exception to minimum trench width**  
The minimum width of trench obtained from tables 1 and 2 may be modified in the following circumstances, to the approval of the Engineer:

- where personnel will never be required to enter the trench;
- where personnel will never be required to enter between pipeline and trench wall;
- in unavoidable constricted situations.

TABLE 1

Minimum trench width in relation to nominal size DN

DN	Minimum trench width (OD + 2x) (mm)
≤ 225	OD + 400
> 225 to ≤ 350	OD + 500
> 350 to ≤ 700	OD + 700

TABLE 2

Minimum trench width in relation to trench depth

Trench depth (m)	Minimum trench width (mm)
< 1.00	No minimum width required
> 1.00 ≤ 1.75	800
> 1.75 ≤ 4.00	900
> 4.00	1000